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NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY

William Jesse Bacon
University of Kentucky, w.jesse.bacon@gmail.com
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William Jesse Bacon, Student

Dr. John Nash, Major Professor

Dr. Justin Bathon, Director of Graduate Studies

NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education in the
College of Education at the University of Kentucky

By

William Jesse Bacon

Lexington, Kentucky

Director: Dr. John Nash, Professor of Educational Leadership Studies

Lexington, Kentucky

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ABSTRACT OF DISSERTATION

NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY

Induction programs are comprehensive initiations or introductions to a position that provides beginning teachers with the necessary tools for starting their teaching careers, as well as specific guidance aimed at helping them meet performance standards. Induction programs may include mentoring, assistance in planning, professional development, and evaluation. Other terms used for induction include support, orientation, training, internship, assistance or assessment programs, retention programs, beginning teacher program, transitional program for existing teacher, cohort program, phase-in, professional development, and workshops. School districts across the country have turned to effective induction programs in response to rising teacher attrition rates. Comprehensive induction programs that develop highly efficacious teachers report a decline in teacher attrition and an increase in job satisfaction.

Research suggests that if teachers have appropriate support and training, they become more confident in their ability to positively impact student success. This, in turn, contributes to their likelihood of staying in the profession, thus increasing teacher retention rates. Quality programs for all beginning teachers are important, and research shows that beginning teachers who participate in induction programs are nearly twice as likely to stay in the profession as those who don't. Beginning teachers are typically expected to carry out the same tasks, in and out of the classroom, as more experienced teachers. As they do so, beginning teachers possess feelings of isolation and lack of support. These, as it happens, are major factors beginning teachers' decisions to leave the education profession.

The intent of this mixed-methods action research (MMAR) study was to assess the level of self-efficacy of beginning teachers across the domains of instructional strategies, student engagement, and classroom management before and after the completion of a newly designed district induction program. The study explored the induction program's structure in a large, suburban Kentucky school district to evaluate the extent of participant self-efficacy levels and to what degree best practices in induction are utilized, as defined in the review of the literature. Data were collected before, during, and after beginning teachers' participation in a five-month induction program.

In this study, we learned that a beginning teacher induction program is a promising practice to increase teachers' self-efficacy at Williamstown Public School District. Results of the study indicated positive influences for beginning teachers' efficacy to implement high-yield instructional strategies, effectively engaging students, and design classroom management systems to impact student success.

KEYWORDS: beginning teachers, induction program, teacher self-efficacy, new teacher support, teacher attrition

William Jesse Bacon

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NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY

By

William Jesse Bacon

Dr. John Nash
Director of Dissertation

Dr. Justin Bathon
Director of Graduate Studies

April 13, 2020
Date

DEDICATION

I dedicate this work to my family. The journey that I have been on to complete this degree has been long and difficult. Without the love and support of my family, I would not have had the will or endurance to press on and finish. God has blessed me with supportive parents, two amazing children, and a loving and beautiful wife.

I would like to thank my children: Nora and Piper. Thank you for being patient and understanding while I was working on the computer instead of spending my extra time with you. It is my prayer that each of you see the value in working hard and becoming the best you can possibly be. I cannot wait to see what God has in store for your futures! I am so proud to be your father and I love you both so very much!

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CHAPTER 1

Introduction

The public education system in the United States was designed to create productive citizens (Burbules & Torres, 2000). To accomplish that goal, the system must prepare students to think critically, solve creatively, and communicate effectively with each other. Students in classrooms today no longer compete with peers in their community for postsecondary opportunities; rather, they compete with students from all over the world (Mongillo, 2011). School districts that wish to provide their students with a competitive advantage in an increasingly global society will need to employ highly qualified, competent teachers in all stages of education. "A country's performance does not begin with its corporations. Rather, it begins in the mindsets of its people; how people are taught to think, to deal with one another, to work together…the race begins at school" (Smith, 1995, p. 100).

Population and demographic trends indicate communities and schools are becoming more diverse, intensifying the demands placed on the education system, and ultimately the classroom teachers they employ (Smelser, Wilson, & Mitchell, 2001). Students come to school with varying degrees of experiences, needs, and abilities. The achievement gap between racial and socioeconomic groups has been publicized for decades. Students of color and those who come from low poverty homes achieve at lower levels than other students. However, little progress has been made to close the gap (Rothstein, 2004). There is an increasing consensus that teacher quality is a critical component in reducing the achievement gap. For instance, teacher effectiveness has more impact on student achievement than other factors (Liston, Borko, & Whitcomb, 2008).

And teacher quality is frequently cited as the most important factor in student learning (Feiman-Nemser, 2001; Futrell, 2008; Johnson & Kardos, 2008; Upokodu, 2007).

Every year beginning teachers enter classrooms across the United States with a passion and inspiration to make a significant difference in the lives of the students they serve. For many, these emotions quickly fade, as nearly half of beginning teachers leave the field within the first five years of teaching (Smith & Ingersoll, 2004). Across the country, between one third and one half of beginning teachers leave their positions within the first three years of their career (Ingersoll & Smith, 2004).

This mixed-methods action research (MMAR) study, conducted in a suburban Kentucky school district, explores the role a teacher induction program can have on enhancing beginning teachers' level of the self-efficacy in implementing instructional strategies, fostering student engagement, and managing classrooms effectively in hopes that it leads to a decrease in the attrition rate. The study will unfold in phases, starting with diagnosis and reconnaissance phases to inform the induction program design, followed by an implementation and outcome evaluation of the program to understand the induction program's influence on beginning teacher self-efficacy. In this chapter, I discussed the context of the study site and introduce the problem of practice. Also included in the chapter is a diagnosis of the problem relative to the study context and supporting literature for an intervention.

Context

This study took place in the Williamstown Public School District (WPSD). WPSD is the 7th largest school district in the state. It is located 25 miles south of the largest city in the state and has both urban and suburban characteristics. The district

serves approximately 13,000 pre-kindergarten through 12th-grade students from various communities and employs over 2,000 certified and classified staff. WPSD is comprised of 23 schools consisting of 13 elementary schools, six middle schools, three high schools, and an alternative center. The district also has an opportunity center that houses an advanced career readiness program and an advanced mathematics and science program.

Little ethnic diversity exists among the students in WPSD. Ninety-two percent of enrolled students identify themselves as White. Additionally, 57% of students qualify for free or reduced-priced meals. WPDS has a graduation rate of 92.7%, which is slightly higher than the 90.8% average for the Commonwealth of Kentucky.

WPSD has experienced steady growth in student enrollment over the last three years as a result of the rising population in the county. For the 2009-2010 school year, the district served approximately 10,200 students. During the 2018-2019 school year, enrollment increased to almost 13,000. New students moving into the district and transfer enrollments from a larger neighboring school district contributed to the increased enrollment. As a result of the increase in student enrollment, the district has also experienced an increase in students who qualify for special education services. In addition, the district has seen a higher number of students entering Kindergarten identified as "not ready." There has also been a significant increase in enrollment in schools located within one county neighborhood due to a boom in residential development and new home construction.

Organizational Structure

The organizational structure of WPSD is hierarchical. The district is governed by a five-member board of education elected by citizens from a geographically defined area

of the district. The board's primary function is to set policies that govern district operations and approve the annual budget. The board is also responsible for hiring the superintendent of the school district and the board attorney.

The superintendent oversees all district operations, ensure the policies and procedures adopted by the board are implemented throughout the district, recommend an annual working budget for board approval, and provide direct support and supervision to the Chief Financial Officer, the Assistant Superintendent for Support Services, the Assistant Superintendent for Student Learning, the Director of Secondary Schools, the Director of Elementary Schools, and the Director of College and Career Readiness. The Superintendent meets weekly with these officers to discuss opportunities and challenges present in all aspects of district operations.

The Chief Financial Officer oversees all employees in the accounting and finance office. The Assistant Superintendent for Support Services oversees six directors responsible for buildings and grounds, food service, transportation, technology, and construction. The Assistant Superintendent for Student Learning oversees six directors responsible for special education, safe schools, data, research and accountability, human resources, pupil personnel, and grant writing. The Director of Secondary Schools oversees the middle and high school principals in the district. The Director of Elementary Schools oversees the district elementary school principals. The Director of College and Career Readiness oversees the principal of the area technology center and the opportunity center while working with local businesses and postsecondary educational institutions to increase partnerships with the district.

There are 24 school principals in the district, one for each of the thirteen elementary schools, six middle schools, three traditional high schools, two alternative high schools, and one area technology center. Each school has its own site-based decision-making council comprised of the principal, three teachers, and two parents of students enrolled in the school. School councils are designed to promote shared leadership among those who are close to the students. The council sets school level policy and makes decisions to provide an environment to enhance student achievement. When a principal vacancy exists, the council is responsible for hiring the principal with assistance from the superintendent.

Teaching Conditions

WPSD is profoundly affected by the local teacher's union. The union has a collective bargaining agreement with the local board of education, which governs the conditions of teacher employment and limits the amount of time and extra activities that principals can require. The district employs 760 full time certified teachers. Teachers are contracted to work 187 days a year. Contracted days include 170 days of student instruction, seven days of planning, four paid holidays, four professional development days, one opening day, and one closing day. The planning and implementation of teacher professional development activities is the responsibility of individual school councils and their professional development committees. According to the plans developed and approved by individual school-based councils, principals are required to grant professional leave days for teachers wishing to participate in courses, workshops, seminars, conferences, and other such programs that relate to the teacher's professional

growth plan. School councils are encouraged to work cooperatively with each other in order to provide optimal professional development experiences for their teachers.

The typical weekly teaching load for district high school and middle school teachers can include no more than twenty-five teaching periods in a thirty-period week, and five planning periods. If a school is structured so that it has more or less than six periods in a school day, teachers are provided no less than one full period each day for planning. Elementary teachers are provided with 225 minutes of planning time per week. Planning time for elementary teachers is provided each day and is balanced throughout the week. Planning times cannot be interrupted more than once a week by administratively mandated activities such as team meetings or professional learning communities. Exceptions to this condition include Admissions and Release Committee or Section 504 meetings for students with disabilities.

Principals are required to provide an agenda for faculty meetings twenty-four hours in advance of the meeting. Mandatory attendance at faculty meetings cannot exceed fifteen meetings in one school year. Additionally, faculty meetings cannot exceed one hour in duration and must begin within twenty minutes of the end of the student day. The limited amount of mandatory time principals can ask of teachers encourages routine matters such as communicating information and procedural discussions to be handled in such a way as to permit optimum use of time with faculty for planning and evaluation of the school's instructional programs.

Required teacher attendance at school activities other than faculty meetings such as Parent Teacher Association events, open houses, parent teacher conferences, extra-curricular events, etc., at times outside of the typical school day, cannot exceed two times

per month or a total of five activities per year. Additionally, these activities cannot exceed more than 2.5 hours of required attendance.

Researcher Role in the Organization

As the WPSB Superintendent, I am the Chief Executive Officer (CEO) of the school district. It is my job to work closely with the locally elected board of education to set the vision, goals, and objectives for the district, and then see to it that the goals are achieved. It is also my responsibility to hire and supervise other district-level administrators and the school principals.

One of my primary duties as the district superintendent is to make recommendations about educational programs, spending, and staffing for all schools. In doing so, I have a responsibility to continually look for methods, both large and small, to improve the district with a continuous improvement mindset. As the instructional leader, the most important job I have is to ensure students are learning and achieving at high levels. I must stay up to date on best practices for maximizing student achievement and support teachers in their efforts to provide high-quality educational experiences. To do so, it is essential to ensure that the district develops and retains high-quality personnel.

Problem of Practice

The turnover rate for beginning teachers has increased in WPSD over the past five years. For the purpose of this study beginning teachers are defined as teachers who are within the first five years of their teaching career. The district employs a total of approximately 700 teachers. Since 2014, beginning teacher attrition rose from 35 per year (11%) to 46 new per year (18%) and was as high as 52 (19%) in 2017. The consistent

increase in student enrollment in recent years further highlights the need to develop and retain highly effective teachers.

Teacher Attrition Literature Review

Every year beginning teachers enter classrooms across the United States with a passion and inspiration to make a significant difference in the lives of the students they serve. For many, these emotions quickly fade, as nearly half of beginning teachers leave the field within the first five years of teaching (Ingersol & Strong, 2011). Many districts create support systems in the form of induction programs. Even though the programs that are offered vary significantly, teachers seem to benefit from any level of support. Ingersoll and Strong (2011) also suggested that beginning teachers who received some type of induction had higher job satisfaction, commitment, or retention. Other positive outcomes include increased self-efficacy and enhanced instructional practices, two key factors associated with long-term growth and job satisfaction for teachers. In order to understand the impact an effective induction program can have on teacher retention; it is essential to examine reasons beginning teachers leave the profession.

Causes of attrition. There are multiple reasons teachers leave the profession. The most qualified teachers often leave in search of careers with better working conditions, less stress, and higher salaries (Darling-Hammond, 2000; Ingersoll & Smith, 2004). O'Brien, Goddard, and Keeffe (2008) found that by the second year of teaching, 29% of beginning teachers were thinking about leaving the classroom while 10% of them had already decided to leave. Lack of support, increasing pressures, and isolation are frequently cited factors.

Lack of support. Beginning teachers consistently cite lack of support from school administration as a primary reason for leaving the profession (Alliance for Excellent Education, 2004; Ingersoll & Strong, 2011). In 2008, the United States Department of Education (USDOE) surveyed teachers with 1-3 years of experience who left the classroom. The results revealed that 28.6% of the teachers surveyed left the field to pursue a different career because they were dissatisfied with the level of support, they received from their school administrators. Of the 28.6% of teachers that left due to dissatisfaction with administrator support, 11.7% explicitly expressed frustration over the lack of support provided during the first year of their career (Reeder, 2013). Some researchers argue that it is because of this type of discontent that 20-50% of teachers leave the profession by their 5th year (Ingersoll, 2003).

Without proper support and guidance from building administrators, beginning teachers struggle for survival during the transition from clinical practice to taking on full-time teaching responsibilities (Howe, 2006). When beginning teachers make the transition from postsecondary preparation programs, many report the theories learned in teacher preparation coursework do not adequately prepare them for the transition to full time teaching in the classroom (Howe, 2006). More comprehensive support from school administration during the transition period is needed to reduce the chances that beginning teachers experience a lack of support, struggle to handle daily stress and pressures, and ultimately end up leaving the profession.

Increasing pressure and burnout. Education reforms in recent years have led to an increase in school accountability through high stakes testing. This environment can lead to an increase in teacher stress levels as pressure mounts for students to perform on

state tests. Studies have shown that increased levels of stress often lead teachers to suffer from burnout (McCarthy, Lambert, O'Donnell, & Melendres, 2009). In many cases, beginning teachers are expected to perform the same duties as veteran educators while also learning the nuances of the profession (Lesnick, Jiang, Sporte, Sartain, & Hart, 2010). This demand leaves beginning teachers feeling overwhelmed and less confident in their ability to cope with the demands of a stressful career. In many schools, beginning teachers are given the course loads that veteran teachers do not want, including remedial classes, schedules that require multiple preparations, and classrooms full of students with various learning needs (Brewster & Railsback, 2001). Howe (2006) argues that pressures such as these result in beginning teachers feeling isolated and leads them to question whether they possess the necessary skills to impact student success positively.

Isolation. When teachers enter a district for the first time, a feeling of isolation can be detrimental to self-confidence and skill development. Buchanan et al. (2013) identified four types of isolation that have the potential to negatively impact beginning teachers. Physical isolation is the feeling of being alone in the classroom without the support of another teacher. Beginning teachers have the potential to experience this type of isolation when they do not receive meaningful feedback on job performance. Geographic isolation refers to working in an area where job-specific professional development opportunities are scarce or require significant travel by the beginning teacher. Professional isolation exists when a teacher is the only teacher of a subject or course in a school, teaches outside of his or her expertise, or is unable to access resources to reach maximum effectiveness. A final type of isolation is emotional isolation. Emotional isolation refers to the feeling that comes when teachers fail and do not admit

to needing help or wanting to ask for help (Buchanan et al., 2013, p. 122). Isolation can be a significant factor to beginning teacher burnout and attrition. Induction programs implemented to address retention must address and remove each type of isolation experienced by beginning teachers.

Diagnosis Phase

The first stage of this MMAR study is a diagnosis phase in which a problem of practice is identified (Ivankova, 2015). The purpose of the study and the desired outcomes were developed in this phase. A literature review was conducted to learn more about the problem of practice and the potential opportunities that may influence a solution.

From September 2018 through January 2019, I became increasingly concerned with the number of teachers who attempted to resign to seek employment in another district or leave the teaching profession altogether. Through the course of the time frame mentioned above, 17 teachers requested a release from their contract. This data prompted a deep dive into the number of teachers the district was losing every year. Between 2014 through 2017, the teacher turnover rate had risen considerably from 11% to 18%. The data discovered raised the question: Why are teachers leaving the school district in increasing numbers?

Former Teacher Surveys

To help answer the question posed above, the human resources department drafted a survey to distribute to teachers who voluntarily left the district from June 2014 through May 2018, before retirement eligibility. The intent of the survey was to explore if former teachers were still employed in the education field and to help explain why they

chose to leave the district. Open-ended questions provided an opportunity for teachers to reflect on the experience they had as a teacher in the district. Further, these surveys assessed teachers' perceived level of support in the areas of implementing high yield instructional strategies, using effective student engagement techniques, and developing successful classroom management systems. Teachers rated their feelings of support on a scale of one (I received no support) to four (I received adequate support). Responses were anonymous.

The human resources department, using contact information available, distributed 126 surveys, of which 39 were returned, reflecting a response rate of 31 percent. Several factors impacted the quality of the sampling frame and the response rate. There are several former teachers for which no contact information was available. Therefore, a survey was not sent to them. Furthermore, since the district does not maintain accurate records on former employees, there is no guarantee that every survey sent was received by the former teacher to whom it was addressed.

Review of Survey Results

Open-ended questions were used to learn more about the teachers' perceived experiences in the district. Closed-ended questions were used to determine measures of central tendencies. Both question types were used to gauge whether teachers felt supported in the district and if they believed they could make a positive impact on student success. Reviewing responses helped me determine what additional support is needed for beginning teachers new to the district.

Former teachers' responses on the open-ended portion of the survey expressed feelings of isolation. One teacher wrote, "while veteran teachers told beginning teachers

how things were done in the school, teachers spend their teaching day isolated from other adults." Other teachers described an inability to manage classrooms effectively. An example from one teacher surveyed included, "I want my classroom to have a relaxed atmosphere so students can feel free to express their thoughts, but I often have trouble balancing that with keeping order and ensuring class time is productive."

Another theme that emerged was teacher frustrations with a lack of improvement in student achievement. This was evident with comments such as, "I feel like I try every trick in the book with some students and it doesn't seem to make a difference. That is so disheartening." Furthermore, teachers expressed concerns that they are unprepared for the numerous challenges students must overcome. One teacher expressed "some of my kids come to me with so many social and emotional issues, just getting them to think about school is a challenge." There also seemed to be a general level of uncertainty felt about what the future holds for the education profession. One teacher expressed, "the changing demands on teachers are daunting. Who has the capacity to do it all? I don't know how this job will even be feasible in the future at this rate."

The responses of the open-ended surveys were compared with the results from the closed-ended portion of the survey. The comments expressed by the teachers suggest that beginning teachers need to experience mastery moments in order to increase their belief that they can make a positive impact on student outcomes (Tschannen-Moran & Hoy, 2007). Support beyond verbal persuasion, and secondhand experience from veteran teachers should be provided. The feelings expressed by these teachers suggest they need to be provided the opportunity to demonstrate to themselves that they can become effective teachers. That can be provided through a comprehensive program of support.

Analysis of closed-ended questions reflect a lack of teachers' perceived level of support in the areas of implementing high yield instructional strategies, using effective student engagement techniques, and developing successful classroom management systems. For all three areas, the average rating of the level of support teachers perceived to have received during their time in the district was less than 2.1 on a 4-point scale. Therefore, an intervention to explore how the district might increase the level of beginning teacher self-efficacy in the areas of instructional strategies, student engagement, and classroom management was needed.

Finding Attrition Solutions

To combat rising teacher attrition rates, policymakers in many states have attempted to increase the supply of teachers available by implementing alternative teacher certification programs to entice individuals working in the private sector to enter the teaching profession (Reinhardt, 2011). Financial incentives have been offered to attempt teachers to remain in hard to staff schools. Not only have these approaches failed to solve the growing teacher attrition problem, but research shows that teachers who enter the field through alternative routes have attrition rates that are double that of traditionally trained teachers and sixty percent of alternatively certified teachers leave the profession by the third year (Darling- Hammond, 2000). Likewise, teachers who are enticed by the financial incentives are overcome by the same stressors that caused the school to be difficult to staff (Darling-Hammond, 2000). Darling-Hammond (2000) suggests the answer is not to create alternative ways to certify individuals to become teachers or to provide them financial incentives to remain in the profession when overcome with

stresses of the job. Instead, schools and districts should focus on how to support beginning teachers in their efforts to combat attrition.

The extent to which teachers feel as though they are having a positive impact on students is an important factor in whether or not teachers remain in the field (Tschannen-Moran & Hoy, 2007). Teacher quality is one of the most important indicators of student success, so schools and districts must establish programs that will develop beginning teachers into self-efficacious and accomplished professionals (Reeder, 2013). The most frequently cited issues beginning teachers struggle with during their initial years in the profession include: (a) adjusting to full-time teaching demands; (b) managing colleague and parent relationships; (c) understanding the cultural contexts of the school; and (d) coping with the clash between theoretical expectations developed in preservice training and the realities of the modern classroom (Buchanan, 2006; Ewing & Smith, 2003; Fetherston & Lummis, 2012). Improving beginning teacher self-efficacy may be the key for school and district leaders to decrease attrition rates.

Past Beginning Teacher Support Practice

I examined practices that the district already had in place to support beginning teachers. I discovered that, since its initiation in 1985 by the Kentucky General Assembly, the Kentucky Teacher Internship Program (KTIP) had served as the sole program used by WPSD for guiding and assessing beginning teachers. KTIP legislation was the beginning of major teacher certification reform in Kentucky and was further strengthened with the passage of the Kentucky Education Reform Act (KERA) in 1990.

KTIP was designed as a year-long program to help beginning teachers experience a successful first year in the classroom. In KTIP, each beginning teacher was provided

assistance from a three-person committee trained in the supervision and assessment of beginning teachers. The EPSB provided formal training for members of the three-person committee to prepare committee them to serve on a beginning teacher's committees. All principals, teachers, instructional supervisors, teacher educators, and university faculty who planned to serve on KTIP committees were required to complete training before committee assignment.

The school year was divided into three cycles, with each cycle tasking each committee member with mentoring, observing, and providing feedback to a beginning teacher. By observing and mentoring a beginning teacher, the KTIP committee supported effective teaching practices and guided the beginning teacher's professional growth. At the end of each cycle, the committee would meet with the beginning teacher to identify strengths, opportunity for growth, and to develop a detailed plan of support for the next cycle.

Beginning in 2018, the Kentucky General Assembly ceased funding for the KTIP program. As a result, the program was suspended indefinitely, leaving districts to incorporate an independent support program for new hires. This has resulted in the lack of district-wide systemic support for beginning teachers in WPSD.

Diagnosis Conclusion

In order to develop and retain talented teachers, WPSD needed a district-wide program to assist with the retention of beginning teachers. The intent of the program was to provide more hands-on support for beginning teachers and have additional personnel available to direct them towards beneficial resources. The goal of the program was to increase teacher self-efficacy in the areas of instructional strategies, student engagement,

and classroom management to increase the likelihood of retaining a higher percentage of beginning teachers. Conducting an MMAR study provided the opportunity for a holistic examination of the need for the program, its design, and an evaluation of its quality and the extent to which teacher self-efficacy was related to participation in it.

Beginning Teacher Induction Supporting Literature

A high-quality beginning teacher induction program is widely accepted by the education community as a critical step in the development and retention of effective educators. School districts have developed induction programs to reduce high turnover rates among beginning teachers. In the sections below, I define self-efficacy and discuss what the research suggests about the development of teacher self-efficacy, the importance of a teacher's early years in the profession, and how an induction program may serve as a way to produce more efficacious teachers who are more likely to become career long educators.

The section concludes with a detailed analysis of classroom instruction, student engagement, and classroom management constructs. In Chapter 2, I explore what the literature suggests are best practices in a comprehensive induction plan which produce highly efficacious and satisfied teachers.

Teacher Self-Efficacy

Bandura (1997) developed the Social Cognitive Theory in which self-efficacy is rooted. Social Cognitive Theory assumes people choose a course of action based on the relationships between external and internal forces combined with current and past behavior (Henson, 2001). Self-efficacy is defined as an individual's belief in his or her capacity to organize and execute the appropriate action(s) to produce a desired result

(Bandura, 1997). Self-efficacy is a powerful predictor of behavior because it is explicitly self-referent in nature and is directed toward perceived abilities given specific tasks (Henson, 2001). Because of its predictive power and application for behavioral tasks, the self-efficacy theory is a common theme in current views of motivation (Henson, 2001). In this section I discuss self-efficacy specific to the education field and the impact it has on teachers and their students.

Researchers in the field of education have developed their own thoughts on self-efficacy as it relates to educators. Teacher self-efficacy is the belief teachers have regarding their capacity to influence how well students learn (Guskey & Passaro, 1994). Similarly, Tschannen-Moran and Hoy (2001) described teacher efficacy as a teacher's beliefs of his or her abilities to achieve desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated. Each definition references the power of teacher beliefs in themselves and their capability to positively influence all students.

Teacher self-efficacy has an impact on student motivation, achievement, and student efficacy. People with negative self-efficacy do not give sufficient effort to pursue attainable goals because they feel as though their efforts will be futile (Guskey & Passaro, 1994). Teachers with positive self-efficacy about their ability, increase student achievement and motivation (Ashton & Webb, 1986; Grant, 2006). Efficacious teachers see student learning as a highly valued attainable goal. Teachers who believe in their ability to teach usually develop a "whatever it takes" attitude toward instructional design.

When positive teacher self-efficacy is developed in the early years of teaching, it will remain relatively stable thereafter (Woolfolk Hoy & Burke-Spero, 2005). Bandura

(1997) suggests that teacher self-efficacy beliefs are developed from four sources: (a) verbal encouragement of colleagues, supervisors, and administrators; (b) success or failure of other teachers who serve as models for beginning teachers; (c) perceptions of past experiences of teaching; and (d) level of emotional and physiological arousal experienced as they anticipate and practice teaching.

Research on the four sources of efficacy in a subject area suggests efficacy can be increased through professional development. Ross and Bruce (2007) randomly assigned teachers to one of two groups: an experimental treatment group in which professional development experiences intentionally nurtured all four sources of efficacy; and a control group. The treatment group's overall teacher efficacy related to instructional strategies, student engagement, and classroom management was stable during the study and higher than the control group. For teachers in the treatment group, classroom management efficacy increased by a statistically significant degree (Ross & Bruce, 2007). The professional learning experiences addressed the four sources of efficacy by providing information-rich tasks, modeling, job-embedded practice, and reflective experiences enhanced teacher efficacy specific to management for teaching mathematics (Ross & Bruce, 2007).

Many beginning teachers lack the mastery experiences that have the greatest impact on raising teacher self-efficacy (Tschannen-Moran & Hoy, 2007). Consequently, beginning teachers rely on verbal persuasion, secondhand experience, and physiological arousal to build their self-efficacy (Tschannen-Moran & Hoy, 2007). Nonetheless, Ross and Bruce (2007) argue that the most important of the four sources of efficacy are mastery experiences. By observing the progress of difficult-to-teach students, teachers

build self-efficacy through episodes in which they demonstrate to themselves that they are competent instructors. Mastery experiences are improved through feedback from mentors or superiors and social validation that attributes achievement outcomes to teacher actions. Because beginning teachers may not have experience to reflect upon, it is crucial that professional development and feedback from administrators and mentors provide opportunities for a novice teacher to practice new skills and experience the gratification in moments of success. Ross and Bruce (20017) suggest that the strongest predictor of self-efficacy, mastery experiences, increases with more effective teaching.

Impact of self-efficacy. Teachers' sense of self-efficacy significantly impacts teacher behaviors and student outcomes (Goddard, Logerfo, & Hoy, 2004). Compared to teachers with lower self-efficacy, teachers with a stronger belief in their instructional skills utilize strategies that are more organized and well planned, and student-centered (Allinder, 1994, Czerniak & Shriver, 1994; Enochs, Scharmann, & Riggs, 1995). Efficacious teachers are likely to spend more time with students who are struggling to understand the material and are less likely to criticize students after a wrong answer (Gibson & Dembo, 1984). Additionally, teachers with high self-efficacy regularly reflect on their experiences to improve practice (Allinder, 1994; Guskey, 1988; Stein & Wang, 1988).

Teachers who are highly efficacious tend to hold high academic standards, monitor all students' progress and behavior, and focus on instruction as well as develop meaningful and warm relationships in the classroom (Ashton, Webb, & Doda, 1983). Although research shows a significant correlation between student achievement and teacher self- efficacy, teacher preparation and induction programs are not focusing on the

self-efficacy needs of pre-service and beginning teachers (Ashton & Webb, 1986; Mongillo, 2011).

Perceptions of self-efficacy may play a critical role in lessening the likelihood of teacher burnout due to the confidence an effective teacher possesses in his/her ability to handle challenging situations (Mongillo, 2001). Included in Bandura's (1997) description of efficacy is the belief in the ability to cope effectively with what comes one's way (Brissie et al., 1988). If high-quality induction programs positively affect beginning teachers' self-efficacy, the literature suggests the effect will positively impact teacher retention (Lowrey, 2012; Swearingen, 2009). This information is particularly meaningful in areas where teacher attrition is high. More attention should be paid to teacher perceptions of efficacy to reduce teacher experience of burnout and increase teacher retention rates.

Teachers with a high sense of self-efficacy show greater openness to new ideas and are more willing to try new methods if they are better suited to the needs of students (Miller, 2012). In turn, highly efficacious teachers plan and better organize their classes, spend more time and energy with students who are struggling, express greater enthusiasm for teaching, and feel more committed to their profession (Miller, 2012). Self-efficacy ultimately affects teaching practice and attitudes toward the entire educational process. Teachers with positive attitudes toward education, a firm belief in their ability to impact student lives, and a passion for teaching that is fueled by intrinsic reward are lifetime teachers. Induction programs provide the experiences, relationships, and elements necessary to develop teacher self-efficacy (Wong, 2001).

In the next section of the literature review, I describe how beginning teacher induction programs can improve teacher self-efficacy and assist districts in reducing attrition rates.

Potential Impact of Induction Programs

Induction is defined as the process of systemically training and supporting beginning teachers from before the first day of school through the first year of teaching (Wong, 2001). It is designed to support teachers transitioning to the profession or to a new district by improving effectiveness through professional development in classroom management and instructional strategies; promoting school culture, philosophies, missions, systems, policies, procedures, and instructional processes; and increasing retention rates of highly qualified teachers (Wong, 2001). The benefits of induction support programs include reduced attrition, increased teacher retention, and increased student achievement (Arends & Rigazio-DiGilio, 2000; Darling-Hammond & Bransford, 2005; Ingersoll & Kralik, 2004). Quality induction programs consist of multi-level support for teachers new to a district.

A culture that supports and encourages professional learning and development is essential for teachers new to the field or those new to a district (Feiman-Nemser, 2003). Within such a culture, opportunities for authentic professional growth exist as beginning teachers collaborate with each other and reflect on their own learning. Induction programs can provide hands-on opportunities for beginning teachers to connect the theoretical content learned in teacher preparation programs with the practice of classroom teaching while under the guidance of a mentor (AFT, 2001). These experiences can be

beneficial by ensuring teachers are better prepared for their jobs, more confident in their skills as a professional, and more likely to remain in the profession (AFT, 2001).

The impact of high-quality induction. While beginning teachers typically begin their first year of teaching with sufficient theoretical knowledge regarding teaching and learning, they do hold limited experience in educational best practices (Lowrey, 2012). The purpose of a quality induction program is to empower beginning teachers, build their self-efficacy, and provide tools needed to succeed in the profession (Lowrey, 2012). A high-quality induction program should increase teacher efficacy, promote quality professional development, and facilitate a collaborative work environment among teachers (Alliance for Excellent, 2010; Reeder, 2013). Induction programs can help improve teacher attrition rates; however, this impact is contingent upon the quality of beginning teacher supports (Ingersoll, 2012; Smith & Ingersoll, 2004).

While post-secondary teacher preparation programs typically offer a supportive network for students aspiring to become teachers, after graduation many beginning teachers start to feel isolated or become overwhelmed with the demands of the classroom. This, in turn, leads to frustration and lower self-efficacy (Chang-Miller, 2009; Lowrey, 2012). Teachers who feel isolated may begin to feel less efficacious regarding their ability to deliver quality instruction to students. This, in turn, has the potential to lead to burnout and an eventual exit from the profession altogether (Walters, 2004). Isolation is a significant threat to positive teacher-efficacy, and a high-quality induction program can combat the feelings of isolation, by offering regular support and encouragement to a beginning teacher (Lowrey, 2012).

Induction and student achievement. Research indicates that beginning teacher support programs that include orientation, mentoring, professional development, and evaluation develop highly qualified teachers who positively impact student achievement (Alliance for Excellent Education, 2004; Brewster & Railsback, 2001; Wood & Stanulis, 2009). Ross and Branch (2007) reported that teachers who score high on teacher efficacy measures are more likely to try new instruction strategies, even those that are difficult and involve risk-taking. The use of such strategies has been shown to enhance student achievement (Ross & Bruce, 2007).

A significant correlation exists between teacher quality and high student achievement (Friedrichsen, Chval, & Teuscher, 2007). Highly qualified teachers who are skilled, knowledgeable, caring, and culturally insightful are the strongest indicators that students achieve their highest academic potential (Breaux & Wang, 2003). A successful induction program is one that subscribes to the philosophy that the better trained teachers are, the higher the level of student achievement will be (Breaux & Wang, 2003). Therefore, student achievement is more likely to increase when students have teachers who have gone through an induction program designed to increase teacher confidence and competence (Reinhardt, 2011, p. 12). A comprehensive induction program that supports beginning teachers will help teachers become more effective sooner. In turn, student achievement should rise, and school districts receive a return on investment from a new-teacher induction program.

The overall quality of instruction can be directly impacted by teacher job satisfaction (National Center for Education Statistics, 1997). Teachers who feel valued are more likely to participate in a professional learning community at their school and

receive professional development to build necessary skills. In turn, teachers feel more confident and satisfied in their careers. Teachers are typically motivated to work harder, which leads to increased student achievement when they are satisfied with their job (Reeder, 2013). Positive working environments facilitate learning through teacher empowerment, establishing a safe learning space, and fostering a supportive school culture (Hircsh, Emerick, Church, & Fuller, 2006). Student achievement increases when teachers feel empowered and experience professional autonomy (Reeder, 2013).

High quality induction components. High-quality educators are in demand nationwide (Strauss, 2014). Yet no recipe exists for producing high-quality teachers. While post-secondary institutions play a critical role in preparing graduates for the teaching profession, school districts must also take responsibility in ensuring teachers are prepared to be effective in the classroom. What a teacher believes about their abilities and training has an impact on their ability to be effective (Lowrey, 2012). While induction programs come in all shapes and sizes, there are common components that frequently appear in the most positively impactful induction programs worldwide. The methods which impact self-efficacy the most include:

- mentoring (Feiman-Nemser et al., 1999; Reeder, 2013);
- rigorous and sustained professional development (Alliance for Excellent, 2010; Darling-Hammond et al., 2009; Ingersoll & Strong, 2011);
- multi-day orientation (Reeder, 2013; Stansbury, Zimmerman, & WestEd, 2000; Wood & Stanulis, 2009); and

- program evaluation to inform program leaders about the strengths and weaknesses of the program (Alliance for Excellent, 2010; Wood & Stanulis, 2009).

Quality induction programs utilize multiple supportive conditions such as (a) content focused groupings, (b) required meetings with principals, (c) administrative observations and feedback, and (d) reduced amount of extra duties for beginning teachers (Bartlett & Johnson, 2010; Ingersoll & Smith, 2004). Common team planning time built into the schedule and ample access to resources are also necessary elements in effective induction programs (Bartlett & Johnson, 2010; Hunter, 2014; Ingersoll & Smith, 2004). While all items may not be present in every induction program, a combination of these elements usually comprises high-quality induction programs that build self-efficacy (Hunter, 2014).

In order to build teacher self-efficacy, an induction program should provide beginning teachers the opportunity to grow from experiences, relationships, and feedback. Increased efficacy can be attributed to increased opportunities to practice high yield instructional techniques, receiving authentic feedback from supervisors, and the development of a sense of accomplishment from having real-world performance experience (Elliott, Isaacs, & Chugani, 2010; McDonnough & Matkins, 2010). As teachers navigate their first year of teaching, their self-efficacy is influenced by their experiences in school and the classroom.

Because quality induction programs have the potential to impact beginning teachers' sense of self-efficacy, this can, in turn, reduce teacher attrition and possibly boost student achievement. And while all induction programs are not equal, a

comprehensive induction program is necessary to affect positive changes (Wechsler, Caspary, Humphrey, & Matsko, 2012). In a study by Wechsler et al., (2012), self-efficacy was examined in 1,940 teacher and 1,300 mentor participants in an induction program. Results of an induction-quality survey showed increased teacher self-efficacy was positively related to induction program quality. Wechsler et al., (2012), identified three induction program components as most likely to increase teacher self-efficacy: collaboration, relationship building, and instructional focus. In the next section, I will discuss how induction programs can impact teacher attrition.

Impact of induction on attrition. Education leaders recognize the importance of providing well-planned, purposeful, and sustained professional support to beginning teachers to maintain a healthy, consistent teacher workforce (Johnson et al., 2005; Whisnant et al., 2005). Literature acknowledges the benefits high-quality induction programs provide in retaining beginning teachers beyond the fifth year of their career (Buchanan et al., 2013; Clarke & Hollingsworth, 2002; Le Cornu & Ewing, 2008). The National Center for Education Statistics conducted a study in 2000 in which the attrition rate of beginning teachers who received induction support was 15%, compared with an attrition rate of 26% for beginning teachers who did not receive any induction support (Whisnant et al., 2005).

When Chicago Public Schools evaluated the city's beginning teacher support program, they found beginning teachers who had a strong professional relationship with a mentor were twice as likely to remain in the field (Kapadia, Coca, & Easton, 2007). Teachers who received authentic support from administrators and colleagues were three to four times more likely to want to stay in education (Kapadia et al., 2007). A similar

study in Santa Cruz, California, revealed that following the implementation of a formal beginning teacher induction program, the retention rate in the district was 32 points higher than the national average and 12 points higher than the state average in California (Kapadia et al., 2007).

Teachers with no induction support are twice as likely to abandon their new career within the first three years of teaching (Projects in Education, 2000). Not only are teachers more likely to stay in teaching with induction support, but these teachers also focus more on the quality of instruction (NCTAF, 1996; Villar, 2004). Most often cited reasons for leaving the education field have been associated with weak socialization structures in schools, marked by a "sink or swim" mentality (Maciejewski, 2007; Smith & Ingersoll, 2004). Building strong socialization structures through a comprehensive induction program for the newest members of a school district addresses the major cause of attrition.

For several decades, school systems have turned to beginning teacher induction as a potential solution to teacher burnout and high attrition. Research supports the claim that induction program elements, especially mentoring, have a positive impact on teacher retention (Ingersoll & Kralik, 2004; Whisnant et al., 2005). In a review of 10 induction program studies, researchers collected retention data for two groups of teachers: those who participated in a year-long induction program for beginning teachers and the retention rate for all beginning teachers within the state (Ingersoll & Kralik, 2004). Four years after their induction experience, 88% of the participants in the program were located and surveyed. While the statewide attrition data for beginning teachers averaged

over 9% per year, the turnover rate for participants in the mentoring program was 4% for four years (Ingersoll & Kralik, 2004).

Ingersoll and Kralik (2004) also reviewed a published study of the Montana beginning teacher support program. They found by the second year of teaching, 92% of beginning teachers who participated in the program remained in the school system compared to 73% of teachers who did not participate (Ingersoll & Kralik, 2004). When evaluating retention rates of teachers between year two and year three, 100% of teachers who participated in the beginning teacher support program remained. However, only 70% of non-mentored teachers remained in the district (Ingersoll & Kralik, 2004).

Teacher's ability to effectively implement high yield instructional strategies engage students at high levels, and design efficient classroom management systems are shown to directly impact their level of self-efficacy (Graham, Harris, Fink, & McArthur, 2001). In the sections below, I discuss in more detail the impact teacher self-efficacy has on each.

Instructional Strategies

Teachers who have confidence in their ability are more likely to try innovative instructional strategies than teachers with low self-efficacy (Rubie-Davies, Flint, & McDonald, 2012). Effective teachers facilitate student learning through interactive instruction and a variety of instructional methods. Due to the need to accommodate various learning styles and maintain student engagement, the use of multiple strategies is crucial to the enhancement of student learning (Jeck, 2010).

Marzano (1998) examined classroom observation data from over 100 studies and more than 4,000 control groups (Marzano, 1998; Marzano, Gaddy, & Dean, 2000;

Marzano et al., 2001). Marzano's studies demonstrated how specific strategies impact student-learning most. Nine instructional practices most often utilized by teachers were identified during the meta-analysis. These nine practices are known as Marzano's high-yield instructional strategies (Marzano, 1998; Marzano et al., 2000, 2001). They include (a) identifying similarities and differences; (b) summarizing and note taking; (c) reinforcing effort and providing recognition; (d) homework and practice; (e) nonlinguistic representation; (f) cooperative learning; (g) setting objectives and providing feedback; (h) generating and testing hypotheses; and (i) questions, cues, and advanced organizers. Marzano's high-yield strategies align with Bloom's Taxonomy and produce more academically successful students (Jeck, 2010; Marzano, 1998; Marzano et al., 2000). Marzano's high-yield instructional strategies empower teachers to disregard the old myth about at-risk students' inabilities to think at higher levels and respond to a variety of instructional strategies designed to challenge students at higher cognitive levels (Jeck, 2010; Marzano et al., 2000).

Significance of instructional strategies. State accountability programs based on standardized tests have driven recent educational reform efforts. Multiple-choice assessments have been adopted in all 50 states and the District of Columbia (Jeck, 2010). As a result, schools have resorted to a "teach to the test" mentality. A one-size-fits-all approach to instruction to quickly cover a lot of material has led to most instruction at Bloom's lowest levels of cognition: knowledge and comprehension (Jeck, 2010). Teachers felt pressured to cover all the material while school leaders encourage multiple-choice benchmark assessments that are designed to mirror state assessments (Jeck, 2010). Teaching to the test while utilizing instructional strategies that emphasize lower cognition

levels (knowledge and comprehension) are widening the achievement gap for many students.

Utilizing a variety of high yield instructional strategies and instructing students at various cognitive levels has been suggested to combat the widening achievement gap resulting from the emphasis on knowledge and comprehension (Jeck, 2010; Marzano et al., 2001). Students learn best when they are challenged and asked to consider and respond to information at higher cognitive levels (Jeck, 2010). Teachers who use multiple tools and methods of instruction are more likely to meet diverse student needs and varying learning styles. Students are more engaged, receptive of new information, retentive of new knowledge, and find school less boring.

Instructional strategies and self-efficacy. Teacher self-efficacy is an important predictor of high academic achievement in all students (Ashton & Webb, 1986; Bandura, 1993; Goddard, Hoy, & Woolfolk Hoy, 2004). Teachers with higher levels of efficacy are more likely to implement higher-order instructional strategies than teachers with lower levels of efficacy (Davies, 2004). Highly efficacious teachers tend to use more innovative instructional strategies and believe that all students can learn on higher cognitive taxonomy levels (Anderman, Patrick, Hruda, & Linnenbrink, 2002; Davies, 2004; Rubie-Davies, 2008). It stands to reason that the result of highly efficacious teachers' greater likelihood to use a variety of instructional methods results in meeting a variety of learning styles and needs in a diverse class. As research has validated, using multiple, innovative instructional delivery methods yields higher academic success rates (Marzano, 1998; Marzano et al., 2001). When teachers have greater success helping more students achieve at high levels, they are more likely to remain in the profession.

Student Engagement

Researchers define student engagement in different ways; however, there is a consensus that engagement is a relevant and multidimensional construct that integrates student thoughts, emotions, and behaviors (Fredericks, Blumenfeld, & Paris, 2004; Furlong, Whipple, St Jean, Simental, & Punthuna, 2003). Student engagement can be viewed as the degree to which students are involved academically, behaviorally, cognitively, and psychologically at school and with learning (Furlong & Christenson, 2008).

Furlong and Christenson (2008) defined each dimension of engagement typology. Academic engagement refers to the amount of time a student spends on completing schoolwork in the classroom or at home, the number of credits the student accrues, and the amount of homework completed. Behavioral engagement refers to attendance, active participation and discussion in class, and involvement in extracurricular activities. These two dimensions are observable and require little or no inferences by the observer. Cognitive engagement is defined as the extent to which students believe school impacts future plans. This notion includes an interest in learning, goal setting, and self-regulation of performance (Furlong & Christenson, 2008). Affective engagement refers to how well the student feels he or she belongs and connects with parents, teachers, and peers. Cognitive and affective engagement are less observable and subject to adult inferences about student internal perceptions.

Significance of student engagement. beginning teachers need support to build efficacy in engaging students in active learning. Student engagement has authentic, practical applications in education. Researchers have considered engagement to be (a) the

primary theoretical model for understanding and intervening with students at risk for dropping out of high school; (b) the foundation of school reform initiatives that focus on developing student perceptions of competence and control, personal goals, and sense of belonging with peers and teachers (National Research Council and Institute of Medicine, 2004); (c) interrelated with the construct of motivation to learn (Appleton, Christenson, Kim, & Reschly, 2006); and (d) applicable to all students (Furlong & Christenson, 2008). According to a 2006 study in which 81,499 students (Grades 9 to 12) from 110 schools in 26 states responded to the High School Survey of Student Engagement, students reported being less engaged during all high school years if they were male; from an ethnic group other than White or Asian; in a lower SES level; or in special education rather than vocational, general education, or advanced classes (Yazzie-Mintz, 2007). More than 25% of students reported not being engaged. These results suggest that all schools have students who are disengaged, apathetic, or discouraged learners, including schools without demographic-related risks (Brophy, 2004). Student engagement is a key issue to all educators, especially inexperienced teachers who need support to build efficacy in engaging students in active learning.

Engaging students is a challenge for all educators, regardless of experience. Research that spans several decades shows that students become less engaged at school as they move from elementary to middle to high school (Marks, 2000; McDermott, Mordell, & Stolzfus, 2001). By high school, as many as 40-60% of students are chronically disengaged from school, not including those who have already dropped out of school (Klem & Connell, 2004). In a 2004 research study conducted by Klem and Connell involving six elementary schools, three middle schools in an urban school

district, roughly one-third of elementary (35%) and middle school students (31%) were identified as disengaged from school.

Research supports the idea that student engagement is a strong predictor of student achievement (Finn, 1989, 1993; Lee & Smith, 1999; Voelkl, 1995). Klem and Connell (2004) explained that when elementary students self-reported high levels of engagement, they were 44% more likely to do well and 23% less likely to do poorly on the performance and attendance index. On the other hand, students with low levels of self-reported engagement were 30% more likely to do poorly and 44% less likely to be at optimal levels on student achievement measures. Elementary students who were identified as highly engaged by teachers, using the Research Assessment Package for Schools (RAPS), were twice as likely to do well on the performance and attendance index and 39% less likely to do poorly on the index than students identified as minimally engaged (Klem & Connell, 2004). Elementary students whose teachers were identified as showing low levels of engagement were 39% more likely to do poorly on achievement measures and 56% less likely to demonstrate consistent patterns of attendance and academic performance (Klem & Connell, 2004). A similar pattern was evident for middle school student self-reports, with highly engaged students being 75% more likely to do well on the performance and attendance index and 23% less likely to do poorly on the index (Klem & Connell, 2004). Middle schoolers who self-reported low levels of engagement were 27% more likely to do poorly and 37% less likely to do well on academic achievement measures (Klem & Connell, 2004). Based on teacher identification, middle schoolers observed to be highly engaged were more than twice as likely to do well on the attendance and performance index and 67% less likely to do

poorly on academic achievement measures. Middle school students who were identified by teachers as disengaged were 83% more likely to do poorly on academic achievement measures and 81% less likely to show high levels of attendance and academic achievement (Klem & Connell, 2004).

The relationship between engagement and academic success is evident in elementary, middle, and high schools and reminds the education community that student engagement is a relevant and significant issue that affects every school. To provide beginning teachers with the necessary tools to impact student achievement, school leaders should develop beginning teacher self-efficacy in engaging students at high levels.

Classroom Management

Classroom management, historically, is viewed as the actions taken by a teacher to establish and maintain control of the classroom environment. In the last 10 years, the literature reflects a growth in the concept of effective classroom management that extends beyond maintaining order and control (Evertson & Weinstein, 2006; Martin & Sass, 2010). Whether viewed through an historical or modern lens, researchers agree on tasks included in the domain of classroom management (O'Neil & Stephenson, 2011). These tasks include

- organizing, allocating, and arrangement of resources (Brophy, 1988; Doyle, 2006);
- establishing and enforcing rules, routines, expectations, and procedures (Brophy, 1988; Doyle, 2006; Evertson & Weinstein, 2006);

- gaining and maintaining student attention and monitoring engagement (Brophy, 1988; Doyle, 2006; Evertson & Weinstein, 2006; O'Neil & Stephenson, 2011);
- facilitating student socialization (Brophy, 1988; Doyle, 2006; Evertson & Weinstein, 2006; O'Neil & Stephenson, 2011); and
- intervening and restoring order when behavior becomes disruptive of learning (Brophy, 1988; Doyle, 2006; Evertson & Weinstein, 2006; O'Neil & Stephenson, 2011).

Effective teachers are experts in classroom management. Classrooms are dynamic environments where teachers and students must appropriately respond to unexpected interruptions and overlapping demands of the teacher's attention. In an average classroom, there is a multitude of learning styles, needs, behaviors, and challenges that impact how efficiently a classroom runs. To keep students actively engaged in learning, teachers are expected to observe and evaluate the classroom environment while being engaged with individual students, small groups, or the whole class (Dibapile, 2012). The teacher must teach well-planned, efficient classes that captivate students' attention, even if those students are not actively working with the teacher while the teacher attends to a smaller group. Routines, procedures, and expectations guide students and provide a predictable environment that offers psychological safety (Lewis, Romi, Qui, & Katz, 2005). Beginning teachers must quickly develop the vital skills for effective management so that learning can occur, despite the many demands of the teacher's time and attention. Therefore, high-quality, well-planned, and executed induction experiences are critical to supporting beginning teachers' development of management skills.

In recent years, student socialization has become included under the umbrella of classroom management. Brophy (2006) explained that student socialization tasks include "actions taken to influence personal or social attitudes, beliefs, and behavior" (p. 17). Expectations and desirable behaviors must be taught, modeled, and reinforced to individual students and the whole class (Brophy, 2006; O'Neil & Stephenson, 2011). The goal of the construct of management is to foster improved self-discipline in students and connectedness to school by improving relationships with teachers and peers (McPartland, 1994; O'Neil & Stephenson, 2011). Classroom management facilitates student engagement. As previously discussed within the student engagement section of this literature review, research has shown a strong relationship between student perceptions of connectedness and student achievement. Freiberg and Lapointe (2006) encourage educators to be cognizant of the link between strong student-teacher and student-peer relationships as preventative factors against such detrimental behaviors as drug abuse and violence. The broader definition of classroom management that includes the recent addition of student socialization prepares tomorrow's citizens for productive participation in society (Bear, Cavalier, & Manning, 2005).

Significance of classroom management. A direct relationship between classroom management and student engagement is undeniable. Klem and Connell (2004) found that highly engaged students perceived their instructors as caring and supportive and their classroom environment as well as structured with high expectations. Wang, Haertel, and Walberg (1993) determined that of 28 variables that can impact student learning, classroom management had the most influence on student learning compared to other factors such as cognitive ability or school demographics. On the contrary, when

classrooms are mismanaged, the available time for instruction is significantly reduced, thereby directly impacting student achievement (Brouwers & Tomic, 2000; O'Neil & Stephenson, 2011). In a classroom lacking management and order, students find it much more difficult to focus, spend their time on task, and retain new information (Brophy, 1998; Dibapile, 2012). Well-managed classrooms become places of freedom to learn and can provide safety to students. Students activate long-term memory by attending to the teacher's instruction without being disturbed and store new information efficiently for quick retrieval in the future (Dibapile, 2012).

The ability to manage a classroom confidently appears regularly in the literature as an important element of effective teaching (Doyle, 1986; Stronge, Ward, & Grant, 2011; Tschannen-Moran & Hoy, 2001). Teachers employ different strategies to control disruptive behaviors. Classroom management training and support for beginning teachers are crucial because some practices can harm students instead of helping them (Dibapile, 2012). Such practices include sending students out of the classroom, which restricts access to the learning environment (Dibapile, 2012). Classroom management is a challenge for educators due to the complex nature of the domain, coupled with the magnitude of impact on achievement. Therefore, beginning teachers need explicit training, modeling, and feedback on management techniques.

Efficacy and classroom management. Teachers who have a greater sense of self-efficacy are more likely to have the motivation needed to manage the learning environment effectively (Bandura, 1997; Stronge et al., 2011; Tschannen-Moran & Hoy, 2001). Teachers who effectively manage classrooms possess knowledge, skills, and a belief in their ability to make proactive and reactive decisions that maintain an

environment that is conducive to learning (O'Neil & Stephenson, 2011). Teachers with high self-efficacy cope well in the face of disruptive student behavior, remain friendly, and build trust with students, which ultimately results in fewer undesirable behaviors (Woolfolk, Rosoff, & Hoy, 1990). Rich, Lev, and Fisher (1996) reported that in their research, teachers with greater self-efficacy assisted students in forming interpersonal relationships. Consequently, teachers with high self-efficacy are more likely to obtain positive classroom results (Rothchild, Morris, & Brassard, 2006).

Bandura (1986) suggested that teachers who doubt themselves as managers are less likely to act when disruptive situations arise, allowing self-doubt to overpower existing knowledge and skill. Teachers with low self-efficacy often verbally criticize failing students and demonstrate a general lack of patience when facing challenging circumstances (Gibson & Dembo, 1984). Ashton and Webb (1986) reported that secondary teachers' lack of confidence in their ability to manage the classroom resulted in strict punishments using authority, verbal abuse, and sending students out of the classroom during instructional time. In the same study, Ashton and Webb described classroom conditions of teachers with low self-efficacy as including "punishment, coercion, and public embarrassment" (Woolfolk et al., 1990, p. 140). These practices are proven to be detrimental to academic achievement (Dibapile, 2012). Moreover, Friedman and Farber (1992) found that teachers who considered themselves poor in classroom management reported higher levels of job burnout as compared to the teachers who considered themselves as highly efficacious in management (Yu et al., 2014). Classroom management is so impactful on student success; beginning teachers need to develop efficacy in this domain to be effective teachers and thus remain career educators.

Summary

There is a rising number of teachers who are leaving the profession and a widening achievement gap that is making it essential that every classroom contains highly effective teachers. The literature suggests that teacher quality leads to higher student success and lower levels of burnout. School districts can turn to induction to equip beginning teachers to handle the challenges they face. Teachers who are confident in their ability and feel adequately prepared to meet the demands of the modern classroom typically report higher student scores than the students of low-efficacy teachers. Effective teachers generally find more satisfaction in their job and become career teachers. Highly efficacious teachers demonstrate a stronger commitment to the profession and foster authentic learning in all students.

Induction is characterized in the literature as a process to develop high-quality teachers who are committed to student achievement and are driven by a passion and work ethic. This passion is fueled by teacher beliefs in their capacity to impact student lives. There is ample support from the literature to conclude that induction is necessary to equip beginning teachers with the skills and support to remain in the profession and increase student achievement.

This research study evaluated the levels of self-efficacy across the three domains of instruction, engagement, and management, beginning teacher perceptions of their experiences while in the induction phase, and the impact of these experiences on efficacy.

CHAPTER 2

The diagnostic phase of the study revealed a teacher attrition trend in WPSD, suggesting that attention be given to the role induction programs play in developing high-quality career teachers. Teachers with high levels of self-efficacy are more likely to develop their craft (Bandura, 1997), exhibit persistence and resilience when faced with challenges (Fisher, 2011; Tschannen-Moran & Hoy, 2001), and positively impact student achievement (Ashton & Webb, 1986; Grant, 2006). Induction programs that produce teachers with high levels of self-efficacy report a significant reduction in teacher attrition rates, improved job satisfaction among beginning teachers, and increased student achievement (AFT, 2001).

Study Purpose

The purpose of this MMAR study was to explore how the development and implementation of a beginning teacher induction program affect the self-efficacy of beginning teachers in the domains of instructional strategies, student engagement, and classroom management. In the initial phases of the study, data was collected to determine what supports beginning teachers need in their initial year of transition into fulltime teaching within the district. In later stages, data were analyzed to understand how the newly developed teacher induction program influenced teachers' self-efficacy in the domains of instructional strategies, student engagement, and managing classrooms effectively.

Methods and Procedures

The goal of this study was to explore the effect a beginning teacher induction program has on influencing the self-efficacy of beginning teachers in WPSD across the

domains of instructional strategies, student engagement, and classroom management. The study explored the induction program's structure to evaluate the extent of participant self-efficacy levels and to what degree induction best practices were implemented with fidelity. An instructional coaching model was developed in collaboration with the district Student Learning Department in response to teachers' beliefs and needs regarding instructional strategies, student engagement, and classroom management.

Research Questions

Integrated research question. This integrated mixed methods action research question the study sought to answer is: How can the development and implementation of a beginning teacher induction program improve beginning teacher self-efficacy in the areas of instructional strategies, student engagement, and classroom management as measured by the Teacher Sense of Efficacy Survey (TSES) and as described through perceptions of teachers?

Reconnaissance Phase Qualitative Research Questions

- What are the self-efficacy scores of beginning teachers in the WPSD as measured by the TSES?

Reconnaissance Phase Qualitative Research Questions

- What goals or expectations do principals have about the development of a beginning teacher induction program?
- What does the literature say about high-quality teacher induction programs?

Evaluation Phase Quantitative Research Questions

- What are the self-efficacy scores of beginning teachers in the WPSD as measured by the TSES following participation in the district induction program?

Evaluation Phase Qualitative Research Questions

- How do teachers perceive the impact of a beginning teacher induction on their self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

Study Design

This study used an MMAR framework (Ivankova, 2015) to inform the development of a beginning teacher induction program within a suburban school district. The goal of the study was to explore how an induction program might influence teacher efficacy in the domains of instructional strategies, student engagement, and classroom management. Data were collected sequentially from August 2019 through February 2020 to assess the influence of the induction program.

This study unfolded in six steps with data collected and analyzed in 3 of the steps. Strands of quantitative and qualitative data were used to answer the research question using a sequential Quantitative → Qualitative MMAR design. The data collection period for the qualitative strand occurred from August 2019-February 2020 and encompassed three phases of this action research study. Qualitative data were used to explore and elaborate upon that which was revealed from quantitative data.

The MMAR framework for this study contained six steps (see Figure 2.1) and was utilized to diagnose the problem, gather data through reconnaissance, develop the

intervention plan, implement the intervention, evaluate the results, and continually monitor progress.

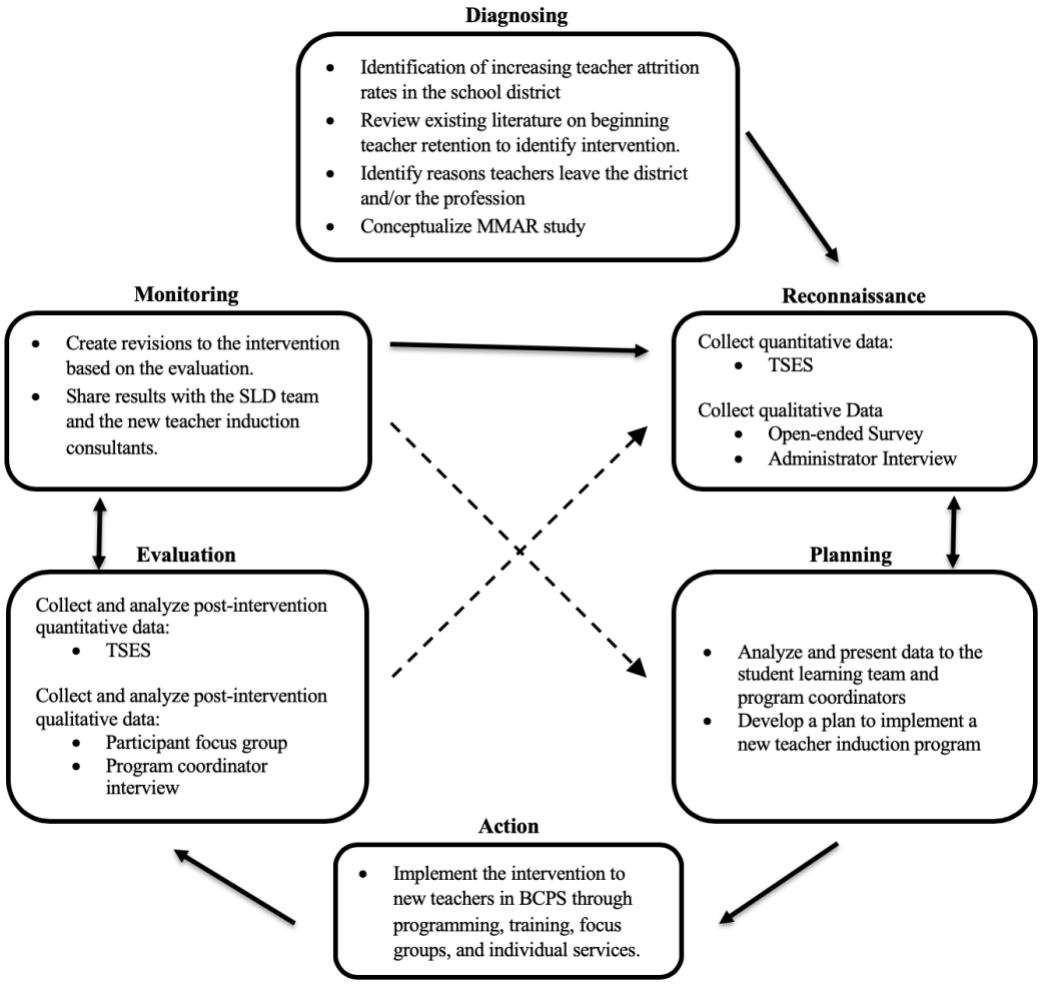


Figure 2.1 Methodological framework identifying stages of action research. Arrows represent cyclical stages. Hashed lines represent potentially repeated cycles.

Reconnaissance Phase

The general purpose of a reconnaissance phase in an MMAR study is to assess the problem revealed in the diagnosis phase, identify areas for improvement, and inform the development of the intervention plan (Ivankova, 2015). This section describes how reconnaissance was carried out for this study.

I met with the Assistant Superintendent for Student Learning, Director of Secondary Schools, Director of Elementary Schools, and Director of Special Education to share the data collected during the diagnosis phase of the study. Based on those data, we determined the district must do more to provide beginning teachers with feedback through a network of support to assist them in developing their ability to implement high yield instructional strategies, increase student engagement, and design quality classroom management systems. A beginning-teacher induction intervention would be developed to increase the self-efficacy of beginning teachers, ultimately reducing beginning-teacher attrition. Such a program would be new to WPSD since a beginning-teacher induction program did not exist within the district. In fact, up until this point, feedback for teachers was provided solely by supervisors and was perceived as evaluative as opposed to supportive.

To further understand the problem of practice and shape the induction intervention, new data were collected, analyzed, and interpreted in a reconnaissance phase (Ivankova, 2015). In this study, the purpose of the reconnaissance phase was to understand what specific support teachers need in the domains of instructional strategies, student engagement, and classroom management and how to best implement an induction program that fits the needs of beginning teachers new to the district. A review of literature helped identify conditions needed to improve teacher self-efficacy through induction. Information from the literature review and data collected in the reconnaissance phase was used to plan an induction program that fits the needs of individual schools, the district, and beginning teachers in WPSD. The program would then be implemented during the action phase of the study and evaluated.

Study Personnel and Participants

Personnel. Because I was also the superintendent of the school district in which the study took place, steps were taken to mitigate the risk of bias, which could be introduced to the study. Since the study involved research subjects who were also professionally supervised by me, additional personnel, described below, were added to the study to mitigate potential bias, which could arise as a result of that power relationship. By adding the additional personnel, all data collected in this study were held confidential from me, masking which teachers participated, and those who did not.

Induction program coordinators. Two retired principals served as the induction program coordinators. The role of the induction coordinators was to deliver content to the beginning teachers during face-to-face induction sessions and support beginning teachers in the implementation of high yield instructional strategies, authentic student engagement techniques, and effective classroom management systems through individual coaching sessions. I was not present during the induction program sessions or the coaching sessions. The induction program was not delivered by me. Therefore, the participants were not rating the performance of a superior, as disclosing to me who the subjects in the study were could have been detrimental to me and the subjects.

Data collector. A third-party data collector, unaffiliated with the school district in which the study took place, was responsible for recruiting potential subjects and collecting data from surveys of teachers' perceptions of self-efficacy and surveys of teachers' experiences. The data collector also maintained detailed field notes from conversations in individual and group coaching sessions, and from interviews with teachers and administrators to discover their responses to the impact the induction

program had on the participating teachers' core classroom operations. As such, I was not present for recruitment activities or data collection.

The data collector was also responsible for analyzing all qualitative and quantitative data. This included maintaining the study code list linking identifying information to the code numbers or pseudonyms of the participants. The code list was destroyed as soon as possible. I never had access to the code list.

An overview of the data collected in each stage is presented in Table 2.1 and is discussed in later sections of the study. At the conclusion of the study, findings were shared with teachers and administrators.

Table 2.1

Data Sources by Phase

Data source	Data type	Data collected	Sample	Phase
Teacher self-efficacy scale (TSES)	Quantitative	Teachers' self-efficacy	Teachers	Reconnaissance & Evaluation
Administrator interview	Qualitative	Goals and expectations for induction program	Assistant superintendent, directors, building principals	Reconnaissance
Induction Session evaluations	Quantitative	Goals and expectations for individual sessions	Teachers	Action
Induction Session Observations	Qualitative	Implementation fidelity	Teachers and program coordinators	Action
Coordinator Interview	Qualitative	Program plan and implementation	District program coordinators	Action & Evaluation
Teacher focus group	Qualitative	Teacher efficacy induction program impact	Teachers	Evaluation

Population / Sample. The population for the quantitative portions of the study is full-time beginning teachers at WPSD. A purposeful sample of teachers was recruited to participate in the study during the Fall 2019 new-teacher orientation meeting, which all 73 beginning teachers in the district attended. During the meeting, time was devoted to introducing the launch of this study, including study purpose, research questions, study design, research period, and time commitment required of subjects. Potential participants were informed that their participation was entirely voluntary, and no negative consequences will result if they choose not to participate.

As a result of the meeting, 41 beginning teachers volunteered to participate in the study. The 41 participants took part in a follow-up meeting at which consent forms were presented, reviewed in detail, completed, and collected from the volunteer participants. Demographic information for the study population is presented in Table 2.2 below.

Table 2.2

Study Population Demographic Information

School Level	Total Teachers	African American	Caucasian	Hispanic (non-white)
Elementary	13	0	13	0
Middle	14	0	14	0
High	14	2	12	0

Reconnaissance Data Collection

Quantitative data in this phase were collected through the TSES, a survey distributed to beginning teacher participants. Data from the TSES was used to measure beginning teachers' self-efficacy before they participated in a formal induction program. It is important to know this for the planning phase of the study as the data was used to plan the induction program, and for comparison purposes in the evaluation phase, as they

formed a key basis for the program effectiveness. Following the analysis of the quantitative survey data, additional qualitative data were gathered to provide insight into how the induction program should be structured to meet the unique needs of the district's teachers. Qualitative data were collected through semi-structured interviews with building principals using a protocol described below. All data collected in the reconnaissance phase was used to develop an induction model to increase beginning teachers' self-efficacy in the domains of instructional strategies, student engagement, and classroom management.

Reconnaissance phase quantitative data collection. Quantitative data collected in this phase were used to understand the self-efficacy of beginning teachers at the beginning of their first year in the district. These data were compared to data collected in the evaluation phase from the teachers after participating in the induction program designed in the planning phase to help inform the impact of the designed intervention.

Teachers' sense of efficacy scale. The Teachers' Sense of Efficacy Scale (TSES) is valid and reliable survey instrument (Tschannen-Moran & Hoy, 2001) used to judge the self-efficacy of teachers across three domains of efficacy: student engagement, instructional strategies, and classroom management. The instrument was selected in this study because of its common use in self-efficacy research and validation among a number of teacher samples with respect to the existence of three correlated factors.

The TSES (see Appendix A) was used in the reconnaissance phase as a data point in understanding WPSD beginning-teacher self-efficacy to inform how components of the induction program should look. It is also used as a part of the evaluation phase by providing a pre-test measure, which will be compared to data from a post-test measure

after the intervention. All administrations of the TSES took place via the online survey administration tool, Qualtrics. The 24-item TSES instrument, developed by Tschannen-Moran and Hoy (2001), allows teachers to rate their level of confidence in their ability to effectively impact student learning across a set of scenarios, indicating how much influence he or she has in each scenario. Influence is rated on a nine-point Likert-scale ranging from one (not at all) to nine (a great deal).

Previous studies have shown the TSES to be reliable. Tschannen-Moran and Woolfolk Hoy (2001) found the reliability of the 24-item instrument to be .94 using Cronbach's alpha. Cronbach's alpha is a measure of how closely related a set of items are as a group. Values closer to 1 indicate higher reliability. Values of .80 to .89 indicate good reliability, while .90 to .99 is indicative of excellent reliability. The TSES in its finalized, 24-item form yielded reliabilities for the teacher efficacy subscales of 0.91 for instruction, 0.90 for management, and 0.87 for engagement (Tschannen-Moran & Hoy, 2001). Table 2.3 displays the self-efficacy domains measured in each item of the tool.

Table 2.3

Teacher Efficacy Domains by Item Number

Self-Efficacy Domain	TSES item numbers
Instructional strategies	7, 10, 11, 17, 18, 20, 23, and 24
Student engagement	1, 2, 4, 6, 9, 12, 14, and 22
Classroom management	3, 5, 8, 13, 15, 16, 19, and 21

Reconnaissance phase qualitative data collection. Qualitative data collection occurred after the analysis of quantitative data in the reconnaissance phase and consisted of a semi-structured interview with building principals. A literature review on induction best practices also served as qualitative data in the reconnaissance phase.

Administrator interview. I explored quantitative data results with a subsequent qualitative semi-structured group interview with building principals in WPSD. When the KTIP program was discontinued, support for beginning teachers were delegated to the administrative teams of individual schools. Principals were selected for the administrator interviews in this study to ensure an understanding of beginning teacher needs from the individuals who had most recently supported them.

Data types were compared to determine what support beginning teachers need in their first-year transition into the district. Qualitative data were analyzed using Dedoose, a qualitative coding software, which assisted the data collector in coding, organizing, and analyzing themes of a diverse data set. Open coding, which groups categories of information into themes that describe findings, was applied. Codes may include information that is expected based on the literature, surprising or unanticipated, and unusual or interesting (Creswell, 2009). The sequential process used strengthened the study and allowed me to draw more accurate conclusions to assist in the development of the induction program designed to enhance teacher efficacy in the domains of instructional strategies, student engagement, and classroom management.

Review of literature. The goal of the literature review was to map out what is currently understood about high-quality induction programs. Published studies were identified through searches of electronic databases accessible through the university's library system. Databases included in this review were: Academic Search Complete, EBSCOhost, Emerald eJournals Premier, SAGE Complete, and Wiley Online Library. The initial search required articles limited to peer-reviewed journal articles, published between 2005 and 2018. The search of articles containing the key phrases: "teacher

induction," "attrition," "beginning teacher," "mentoring," "support," and "self-efficacy" were used to search the literature. The screening process to assess eligibility and inclusion required the published peer review article meet all the following criteria:

- Be in the English language
- Be an empirical study, meta-analysis, or literature review
- Discuss beginning teacher induction, attrition, mentoring and support, or self-efficacy as the main theme.

Reconnaissance Phase Findings

Data analyzed in the reconnaissance phase informed me of teachers' beliefs in their abilities to effectively implement high yield instructional strategies, engage students in learning activities, and develop efficient classroom management systems. Further, information gained through a review of literature and data analysis provided me with understandings of opportunities and challenges felt by teachers and principals that could affect the success of a beginning teacher.

I explored results from the quantitative data with a subsequent qualitative interview and a review of the induction program literature. Data types were compared to determine alignment between self-efficacy beliefs, induction program best practices, and experiences building principals had with beginning teachers. Thus, I gained a better understanding of the type of supports beginning teachers needed to increase self-efficacy. Using a sequential process strengthened the study and allowed me to draw more accurate conclusions to share with the program coordinators and develop a plan for beginning teacher induction during the planning phase. Reconnaissance data were used to develop

an induction program to enhance teacher efficacy in instruction, student engagement, and classroom management.

Reconnaissance Quantitative Findings

Forty-one beginning teachers took the TSES during the reconnaissance phase. Tschannen-Moran and Hoy's (2001) recommendations were used to determine low, medium, and high self-efficacy scores as follows: scores between 1.0-3.99 were considered "low self-efficacy," 4.00-5.99 were designated as "medium efficacy," and values between 6.00-9.00 were regarded as "high self-efficacy." The mean values of the TSES scores in this phase of the study offer a quantitative measure of beginning teachers' perceived levels of confidence and belief in their ability to impact student success through effective instruction, engagement, and management before participation in a beginning teacher induction program (Tschannen-Moran & Hoy, 2001) Descriptive statistics (i.e., mean and median) and measures of central tendency provided a summary view of the participants' self-efficacy.

Reliability. The TSES pre-test had excellent internal consistency (Cronbach alpha=.948)

Overall self-efficacy. Table 2.4 displays the mean responses and standard deviation to all TSES items. The overall mean for all 41 subjects in the reconnaissance phase of the study was 5.42, indicating that beginning teachers initially possess medium. The standard deviation was .92, indicating that the overall scores for each beginning teacher tend to be close to the mean.

Table 2.4

Reconnaissance Phase TSES Self- Efficacy Ratings

Item	Mean	Standard Deviation
Item 1	5.37	1.13
Item 2	5.41	1.24
Item 3	5.51	1.31
Item 4	5.51	1.34
Item 5	6.37	1.36
Item 6	6.39	1.12
Item 7	5.20	1.36
Item 8	5.49	1.38
Item 9	5.39	1.36
Item 10	5.10	1.39
Item 11	5.17	1.53
Item 12	5.56	1.47
Item 13	5.54	1.10
Item 14	5.15	1.41
Item 15	5.29	1.35
Item 16	5.37	1.13
Item 17	5.02	1.41
Item 18	5.20	1.79
Item 19	5.34	1.13
Item 20	5.78	1.46
Item 21	5.29	1.55
Item 22	5.39	1.41
Item 23	5.15	1.30
Item 24	5.22	1.57

When self-efficacy beliefs are high, the teacher feels competent and capable to influence student learning, regardless of the situation. In contrast, if efficacy beliefs are low, a teacher may feel efforts to influence student learning are outside the scope of control (Tschannen-Moran & Hoy, 2001a). The mean score of teachers' self-efficacy rating in the reconnaissance phase was 5.42, defined as "having somewhat" of ability, resources, and opportunity to complete given classroom scenarios (Tschannen-Moran &

Hoy, 2001b). Thus, teachers' ratings meant they felt they had a medium ability to influence student learning, independent of any additional factors.

Instructional strategies. Table 2.5 displays the mean responses to TSES items in the instructional strategies domain from the teachers who completed the survey. The mean for the instructional strategy domain was 5.23, indicating that beginning teachers initially possess medium confidence in their use of instructional strategies that lead to student success.

Table 2.5

Reconnaissance Phase TSES Efficacy Ratings for Instructional Strategies

	Domain Mean	Item 7	Item 10	Item 11	Item 17	Item 18	Item 20	Item 23	Item 24
All Teachers	5.23	5.20	5.10	5.17	5.02	5.20	5.78	5.15	5.22

The highest mean value corresponded to item 20, which asked participants to what extent can they provide an alternative explanation or example when students are confused. Twenty-four teachers (58.84%) indicated they had a high ability to address student confusion, while 39.02% (16) of teachers reflect a medium ability to change course when students are struggling to understand a concept.

Mean values were lowest in item seventeen when teachers were asked how much they can do to adjust their lessons to the proper level for individual students. Five teachers (12.2%) indicated low self-efficacy in this area while 51.2% of teachers (21) felt they possessed a medial ability to adjust their lessons.

Student engagement. Table 2.6 displays the mean responses to TSES items in the student engagement domain. The mean for the student engagement domain was 5.52,

indicating that beginning teachers initially possess medial confidence in their ability to authentically engage students in the learning process.

Table 2.6

Reconnaissance Phase TSES Efficacy Ratings for Student Engagement

	Domain Mean	Item 1	Item 2	Item 4	Item 6	Item 9	Item 12	Item 14	Item 22
All teachers	5.52	5.37	5.41	5.51	6.39	5.39	5.56	5.15	5.39

The highest mean value corresponded to item 6, which asked participants how much they can do to get students to believe they can do well in schoolwork, with 6.39. This indicated teachers believe they possess a high ability to impact student self-confidence. Thirty-four teachers (82.92%) indicated they had a high ability (scoring themselves between 6 and 9) to effect student belief, while 17.07% (7) of all teachers indicated a medium ability (rating themselves at a 4 or 5).

Mean values were lowest on item 14, where teachers were asked how much they can do to improve the understanding of a student who is failing. Four teachers (9.76%) indicated low self-efficacy (with a score between 1 and 3) in this area while 46.34% of teachers (n=19) felt they possessed a medium ability (scoring a 4 or 5) to improve the understanding of failing students.

Classroom management. Table 2.7 displays the mean responses to the classroom management domain items of the TSES from the teachers who participated. The mean for the classroom management domain was 5.52, indicating that beginning teachers initially possess medium confidence in their ability to implement effective classroom management systems that lead to student success.

Table 2.7

Reconnaissance Phase TSES Efficacy Ratings for Classroom Management

	Domain Mean	Item 3	Item 5	Item 8	Item 13	Item 15	Item 16	Item 19	Item 21
All teachers	5.52	5.51	6.37	5.49	5.54	5.29	5.37	5.34	5.29

The highest mean value corresponded to item 5, which asked participants to what extent can they make their expectations clear about student behavior. Thirty teachers (73.17%) indicated they had a high ability (scoring between 6 and 9) to communicate clear expectations, while 26.83% (n=11) of all teachers reflect a medium ability (4 or 5). No teachers indicated a low ability for this item.

Mean values were lowest in items 15 and 21. In item 15, teachers were asked how much they can do to calm a student who is disruptive or noisy. Twenty teachers (48.78%) indicated they had high confidence (between 6 and 9) in their ability to deal with disruptive students, while 17 teachers (41.46%) felt they possessed medium ability (4 or 5) Four teachers (9.75%) indicated they had low self-efficacy (between 1 and 3) when faced with students who are disruptive.

For item 21, teachers were asked how well they can respond to defiant students. Responses for this item were similar to item 15 in that 51.23% of teachers (n=21) indicated they had high self-efficacy (between 6 and 9) in dealing with student defiance, while 34.14% of teachers (n=14) felt they possessed medium ability (4 or 5). Six teachers (14.63%) indicated they had low self-efficacy (between 1 and 3) when faced with handling students who were defiant.

Reconnaissance Qualitative Findings

Administrator interview. A semi-structured interview with building principals was used to help me explore how to best structure the induction program to meet the unique needs of the district. The purpose of interviews with principals was to determine goals for the induction program and gain perspectives regarding challenges for implementation. Three themes emerged from the administrator interview that was used to develop an induction program that fit the needs of the district and the beginning teachers.

Enculturation. Administrators expressed that after beginning teachers are hired, a need exists to ensure they are acquainted with the way the district does things. As one principal said:

> It's the nuts and bolts. What do the beginning teachers need so that they can do their job? Basic information about how the district works, the ins and outs, all the things that even as a student teacher you probably have not been aware of, but that an experienced teacher takes for granted.

It was suggested that the induction program could help meet this need by sponsoring a district-level orientation to review key policies and procedures. In addition, the district could create a cohort atmosphere, thereby establishing an informal network of support for the beginning teachers.

Professional development. Comments made by administrators suggested that beginning teaches need targeted professional development on instructional practices, managing classrooms, and engaging students in learning activities. One principal stated:

> Beginning teachers need to learn situationally relevant approaches to delivering their content. They need to learn to teach content in a way that their students are going to get it, not necessarily the way a book says to do it. They need to learn how to design and implement systems that make sure their classrooms operate efficiently and are set up for student success.

Principals also expressed that standards documents also offer new challenges for beginning teachers. One principal called the district's curriculum standards and pacing guide "a think foreign language book" that had to be interpreted before beginning teachers could learn how to integrate standards into their teaching and not treat standards and teaching as separate tasks. Administrators expressed a desire for additional professional development opportunities for beginning teachers on a variety of instructional practices.

Coaching. Administrators expressed a need for the induction program to include individualized coaching for beginning teachers. They expressed concern over having other teachers in the building serve as coaches for beginning teachers. One principal stated:

> In many ways, coaching is an unnatural activity for teachers. Good classroom teachers are effective because they deliver great instruction, monitor student learning, and engage students in innovative ways. But they don't know how to make their thinking visible to others, explain the reasoning behind their practices, or break down pedagogy in a way that is understandable to a beginner. Nor do they have adequate time to do so because of the responsibilities they already have.

Additional comments made by administrators suggested that coaching should come from an individual who does not evaluate beginning teachers. One principal stated:

> As principals, we evaluate our teachers. While we constantly give instructional feedback to all of our teachers, many times that feedback is viewed as evaluative, especially for beginning teachers whom we haven't built strong relationships with yet. It would be advantageous to get input and another set of eyes in those classrooms from someone who isn't there to evaluate them, but instead to give them feedback to help them grow.

Induction program research. In this section, I introduce what the literature suggests high-quality induction programs look like. I also discuss how a comprehensive induction program might improve the self-efficacy of beginning teachers.

***Models of induction*.** Many studies have been conducted over the past 25 years related to induction, and a recurring theme is how varied induction programs are from state to state and among individual school districts within the state. Specifically, research illuminates a broad range of differences in (a) the allocation of mentors, (b) the duration of the induction period, (c) the commitment to the intensity of induction services, (d) assistance with the transition for beginning teachers from induction to subsequent phases of professional growth, and (e) the role higher education institutions play in induction (Banks et al., 2015).

Current research suggests the effects of induction depend significantly on the number, types, and duration of supports offered to beginning teachers. In Smith and Ingersoll's (2004) project, researchers reported that while there is a relationship between beginning teachers receiving support services and their retention rate, the strength of that correlation depends on the type of support and the number of supports received (Banks, et al., 2015). Feiman-Nemser et al. (1999) attempted to summarize three theoretical framings from the literature. Induction can be seen as a distinct learning phase in which novice teachers develop teaching skill sets. It is also a time of socialization through mentoring and collaboration. Finally, induction may be viewed as a unique phase when teachers learn their craft through daily, hands-on teaching and support.

Research supports an integrated, multidimensional induction program. Ingersoll (2012) argued that teachers who received only two components of an induction program were more likely to remain in the classroom but not significantly higher than a teacher who received no services; however, teachers who received more than four listed elements were twice as likely to stay in the job (Ingersoll, 2012). It is suggested there is a direct

link between the number of induction supports that are offered to beginning teachers and the number of beginning teachers who remain in the classroom (Reinhardt, 2011). In cases when no support was offered, 40% of teachers leave (National Center for Education Statistics, 2004). Programs that offered three support elements reduced the attrition to 28%. Offering six induction supports demonstrated a slight reduction in attrition to 24%. A program that offered eight induction supports experienced an 18% attrition rate. These results support the claim that induction programs should have more than a single component (Ingersoll & Strong, 2011). This study however does not specify which components are most impactful for beginning teachers.

***Induction best practices*.** Induction programs differ in multiple ways, including expected duration, types of support that are offered, and degree of whole-school commitment to the intensity of the program. Therefore, it is essential to explore the best practices used in the effective induction programs that develop high-quality career teachers. Stansbury and Zimmerman (2000) referred to three types of necessary support and two distinct levels of intensity for beginning teachers. Supports include (a) personal and emotional support, (b) problem-focused support, and (c) critical reflection on teaching support (Stansbury & Zimmerman, 2000). Whisnant et al. (2005) explained the two levels of intensity:

> Low-intensity levels might include orienting new teachers, matching beginning and veteran teachers, adjusting working conditions, and promoting collegial conversations. High-intensity supports might include selecting and training effective support providers, providing release time, developing mini-courses to

> address common challenges, examining evidence, networking and group observation, and providing advice. (p. 5)

In 2005, Wong, Britton, and Gansler reviewed the induction programs in five countries who have lower teacher attrition rates than those in the United State: Switzerland, France, New Zealand, Japan, and China. The authors emphasized that they found three attention-worthy similarities among all five counties. First, induction is well structured and based on the belief that beginning years are a crucial period in a teacher's career. Second, induction is based on the foundation of professional development of new and veteran teachers (mentors). Last, programs in these five progressive countries are structured based on collaborative learning among beginning teachers.

Several researchers have examined the components of induction programs that teachers claim as the most beneficial in meeting their needs. Ingersoll (2012) examined 15 empirical studies that focused on the effectiveness of an induction program. Teachers consistently ranked having a mentor teacher from the same subject and common planning time as the most impactful elements of an induction program (Hunter, 2014; Ingersoll, 2012). A thorough look at the literature reveals four main steps that research indicates should be included in a comprehensive induction plan. The first step for beginning teachers is an orientation session to acclimate beginning teachers to the school and culture (Reeder, 2013; Wood & Stanulis, 2009). Orientation should take place at the beginning of the school year and span two or three days (Wong, 2004). In this phase of induction, beginning teachers become familiar with the school's vision, policies, procedures, duties that accompany the job, curriculum, and teacher evaluation process (Reeder, 2013; Stansbury & Zimmerman, 2000; Wood & Stanulis, 2009). This phase

offers an appropriate time for mentors to meet their assigned beginning teacher, catalyzing an environment of collaborative learning (Wong, 2004).

The next step in induction is mentoring. Mentor relationships are so impactful, and many researchers cite mentoring as the most critical element of induction (Bullough, 2012; Feiman-Nemser, 2001; Ingersoll, 2004). Mentoring can appear formal or informal in so long as the mentor coaches, supports, and gives feedback to the beginning teacher (Reeder, 2013). While mentoring is a crucial part of induction, researchers warn that it cannot be the only support type offered (Alliance for Excellent Education, 2004; Ingersoll & Smith, 2004).

The third best practice in induction program literature is the provision of professional development. Training and supporting beginning teachers through quality professional development is a major step in raising student achievement (Alliance for Excellent Education, 2004; Ingersoll & Strong, 2011). Professional development should be engaging, sustained, rigorous, and intentional to address diverse learning needs of students (Alliance for Excellent Education, 2004; Wei et al., 2009). Professional development should occur regularly and focus on building educator knowledge, make instruction more effective, and raise student achievement (Wei et al., 2009).

The final crucial element for a high-quality induction program is evaluation and assessment (Reeder, 2013). Beginning teachers should be evaluated throughout the school year through formal and informal observations. The purpose of the evaluation is to spotlight what is working in the classroom for the teacher and to identify any areas of weakness to improve. Moreover, the induction program itself must undergo a program

evaluation to offer information about potential areas for program improvement (Wood & Stanulis, 2009).

Comprehensive induction and self-efficacy. As a teacher evolves through the first three years of teaching, self- efficacy beliefs are influenced by the induction experiences provided by the district. Increased efficacy beliefs may be due to the increased opportunities to practice specific techniques, receive feedback from supervisors, and the development of a sense of accomplishment via having real-world performance experience (Elliott, Isaacs, & Chugani, 2010; McDonnough & Matkins, 2010). This conclusion tends to compliment Bandura's (1997) postulations about the four origins of self-efficacy: verbal persuasion, vicarious experiences, mastery experiences, and emotional and physiological arousal. This compels induction programs to deliver the opportunities to grow from experiences, relationships, and feedback that build beginning teacher self-efficacy.

Quality induction programs impact beginning teachers' sense of self-efficacy, which in turn influences student achievement and teacher attrition. Many researchers point out that all induction programs are not equal, and a comprehensive program is necessary to positively affect changes. Wechsler, Caspary, Humphrey, and Matsko (2012) examined the effects of induction programs in several categories, one of which was teacher self-efficacy specifically. All 1,940 teachers and 1,300 mentors surveyed were compared based on the quality of induction they received. The results emphasize the significance of quality induction as it relates to increasing teacher self-efficacy (Hunter, 2014; Wechsler et al., 2012). Wechsler et al. identified three components as most likely to increase teacher self-efficacy. "Three elements of induction stand out when looking at

the relationship between beginning teacher induction and increased teacher self-efficacy: collaboration, relationship building, and instructional focus" (Hunter, 2014, p. 45).

Meta Inferences

In this section, I consider and interpret the findings from data collected in the reconnaissance phase. After reviewing the qualitative and quantitative data and reflecting on my own past experiences as a teacher, building principal and administrator, I made several meta-inferences about what components of comprehensive induction programs need to be present in order to increase the self-efficacy of beginning teachers.

Comprehensive induction programs are a way to provide beginning teachers with opportunities to collaborate, gain knowledge from experienced colleagues, be observed by coaches, reflect on their practice, and network with other beginning teachers. Beginning teachers need opportunities to learn about exemplary teaching by seeing what it looks like, talking about it, and experimenting in their classrooms. Quality induction must provide time for teachers to be observed and reflect on their teaching, as well as on their students' learning.

Teachers often underestimate the demands that will be placed on them in their first year of teaching. As a result, they struggle when the support system is not strong enough to help them implement the ideas and knowledge that they gain in their teacher preparation programs.

Professional collaboration. Professional collaboration is a key component of a successful induction program. Learning to teach is a process that is not fully realized by the completion of a teacher preparation program. Beginning teachers need opportunities to continuously learn and improve their practice. Opportunities should include self-

reflection on practice to develop teachers' understanding of content, pedagogy, and how their students learn best. In addition to increasing teacher learning and student achievement, intentional professional collaboration help prevent feelings of isolation, which in turn can increase teacher job satisfaction. Highly effective educators with experience and content knowledge exist in many school districts in many different capacities and should be used as resources to facilitate collaboration for beginning teachers.

Coaching. Beginning teachers are typically focused on developing their practice and do so by gathering information to improve technical skills. In this developmental stage, providing beginning teachers with opportunities to be coached by accomplished educators and receive support in the areas of instruction, engagement, and management can have a positive influence on attrition rates. The guidance of an experienced educator can support beginning teachers to make decisions as part of an experienced team, rather than in isolation. Effective coaches use inquiry-based questioning and support meaningful teaching and learning through individual needs.

Supportive environment. For teachers to do their jobs well, they need a supportive environment where they are valued, trusted, and empowered to collaborate for professional growth. Schools and districts that are not intentional about providing collaborative opportunities leave many teachers to sink or swim. When teachers believe administrators are focused on student and teacher success, they feel more positive about the school environment and choose to stay. When beginning teachers view the feedback they are getting as supportive rather than evaluative, it positively affects their teaching practices, and they are more willing to ask for support. When schools and districts

support teachers and promote a culture of continual learning, teachers enjoy their work and are more successful. Multiple levels of support are necessary to retain beginning teachers by building their self-efficacy as competent professionals.

Quality Assurance and Ethical Considerations

Multiple measures were taken in the reconnaissance phase of the study to ensure validity, reliability, and confidentiality. The primary researcher in this study also serves as the superintendent of the school district. Given my supervisory role over potential subjects, a possibility exists that district staff may feel pressured or obligated to participate even if they do not wish to. To mitigate this undue influence, safeguards were put into place during the reconnaissance phase and remained in place for subsequent phases of the study.

Validity

Because it would be obvious to me and those in the school district which personnel participated in the study and which did not, raw data was held confidential from the primary researcher. To reduce the chances of undue influence, a data collector who was not affiliated with WPSD was added to the study. The data collector was required to complete Human Subject's Protection Training before being added to the study. The data collector was responsible for recruiting potential subjects for the study, administering all surveys, conducting focus group sessions, and maintaining a code list linking identifying information to the code numbers or pseudonyms of the participants. The primary researcher was not present for recruitment, was not present for survey administration or focus group sessions, and never had access to the study code list.

Additionally, two retired principals were utilized as the Induction Program Coordinators. Their role was to deliver the induction program to beginning teachers in the district. Because participants would be providing feedback on their experience in the induction program, had the primary researcher delivered the induction program sessions, it could be interpreted that participants were being asked to rate the performance of their superior. For that reason, the primary researcher did not deliver the induction program to beginning teachers, nor was he present during program sessions. It was determined that the measures described in this section were necessary to protect subject privacy and confidentiality and would remove the potential perception of undue influence.

Reliability

The quantitative instrument selected was specifically chosen for its reliability to determine baseline data and help address the research question in later phases of the study. Details of the instrument reliability were discussed in the relevant sections of this dissertation. Systematic procedures were used to ensure consistency of all data collected.

Confidentiality

Additional actions were taken to protect study participants and guard against actions that might reflect poorly on the school district. The purpose of the MMAR study was explained thoroughly to each participant in a formal setting. Individuals involved in the study were informed about the research questions and data collection methods. When the study was presented to potential participants, the data collector described the benefits of participating, explained the participant roles, and answered questions potential participants had. Participants were informed that I, the school district, and the participants

would equally benefit from the study. It was my goal to encourage collegial relationships and ethical research practices.

Confidentiality was ensured among study participants by giving assumed names to the school district, individual schools, and study participants. All survey responses were anonymous; however, individual assigned identification codes unknown to the primary researcher were used in the place of names. The use of individually assigned identification codes allowed me to compare data in the final stage of the study. Data collected for the study was stored on the data collector's personal computer under password protection in Google Drive, Dedoose, Qualtrics, Word, and Excel.

Consent letters that describe the purpose of the study were provided to all participants. Consent letters were used to ensure that participation was voluntary and that no negative consequences were experienced by anyone choosing not to participate. I attained CITI certification, and before any data was collected, the study was presented and approved by IRB.

CHAPTER 3

Introduction

This chapter begins with a discussion of the planning phase based on results from the reconnaissance phase. A specific induction intervention used to increase teacher efficacy in domains of instructional strategies, student engagement, and classroom management for beginning teachers new to WPSD is presented. Results of data collected over a five-month intervention are reported. Finally, recommendations for further study are presented.

Planning Phase

In the planning phase of an MMAR study, the "action/intervention plan is developed based on mixed methods inferences from the reconnaissance phase." (Ivankova, 2011, p. 410). In the present study, information gathered in the reconnaissance phase was used to develop a beginning teacher induction program to influence teacher self-efficacy in the domains of instructional strategies, student engagement, and classroom management. Because teacher induction models vary across the country, I collaborated with the assistant superintendent for student learning, building principals, and two retired principals who administered the induction program to develop a model and schedule that would most benefit beginning teachers and the district.

The WPSD beginning teacher induction program was planned for a five-month cycle. The program was provided through differentiated support for beginning teachers, ongoing professional support, and collaboration.

Differentiated Support

The first important component of the program was to provide differentiated support for beginning teachers that address individual needs. This was achieved through classroom observation and feedback, instructional modeling, specific coaching, and distribution of resources using Google Classroom. During this induction program, there were scheduled times for the Induction Coordinators to complete classroom observations and provide specific feedback for improvement based on the Kentucky Teaching Framework. The beginning teacher or coordinator was able to schedule additional classroom observations if needed.

The beginning teacher was provided opportunities to request the coordinator model a specific strategy in her/his classroom and or meet to discuss strategies at length. All beginning teachers were invited to join a Beginning Teacher Google Classroom where resources were shared and categorized. Video clips, exemplar model classrooms, articles, and book suggestions were included in the electronic classroom. Resources were continually updated.

Ongoing Professional Learning

The second component of the program was to provide high quality and ongoing professional learning opportunities. As part of the induction program, all beginning teachers new to the district were required to participate in 12 hours of professional learning sessions provided by the induction coordinators. An aggregate approach was taken in designing the ongoing professional development sessions. We examined responses of all 41 beginning teachers on the TSES from the reconnaissance phase and where mean scores were low we used those domains to design the professional learning

sessions. Best practices would suggest we use individual TSES scores to differentiate the professional learning curriculum. However, budget and time constraints did not allow for the team to develop a differentiated approach to the professional learning curriculum.

Teachers completed the first six hours of professional learning during an all-day orientation which included sessions specifically designed to assist in the development of effective classroom management systems to improve student success. The remaining six hours of professional learning addressed behavior strategies, student engagement techniques, and the development and implementation of high yield instructional strategies. Those sessions were delivered throughout the 5-month program in 2-hour segments scheduled on teacher planning days.

Collaboration

The third and final component of the beginning teacher induction program framework was to provide and facilitate an avenue for dedicated collaboration time with school and district administrators, instructional coaches, induction program coordinators, and master teachers. Following each classroom observation cycle, the induction coordinators and beginning teachers spent time to debrief and discuss the observation with a district instructional coach. The purpose of this reflective time was to provide continuity of ongoing support for the beginning teachers. In addition, a detailed observation report was forwarded to the building principal to keep them involved strategies being utilized by the coordinators and instructional coaches.

WPSD is fortunate to have many master teachers throughout the district at all grade levels. At each professional learning session, there were scheduled question and answer sessions about specific topic with various grade level/subject area master

teachers. The opportunity to hear best practice implementation experiences (both positive and negative) provided an additional layer of support for beginning teachers. District level directors were always available for one on one support as needed and were often used as presenters of professional learning sessions.

The framework presented above was developed as a result of data and information gathered in the reconnaissance phase. The goal of the planning phase was to develop a specific framework for an induction program that would impact beginning teacher self-efficacy in the school district. The needs of the teachers and the district were considered when the program was designed. Analyzed data and the proposed plan were shared with the administrators and beginning teachers who participated in the program and the study.

Action Phase

The general purpose of an action phase in an MMAR study is to implement an intervention plan to address the problem revealed in the diagnosis phase, assessed in the reconnaissance phase, and developed planning phase (Ivankova, 2015). The action phase of the MMAR study took place from September 2019 to February 2020. During this phase, the beginning teacher induction program designed in the planning phase was implemented with beginning teachers new to the district for the 2019-2020 school year. The purpose of the intervention was to influence beginning teacher self-efficacy in the domains of instructional strategies, student engagement, and classroom management. The intervention timeline for implementation is presented in Table 3.1 below.

Table 3.1

Beginning Teacher Induction Program Timeline

Month	Activities
September	• First induction program session for Beginning Teachers (6 hours) • Program Coordinators begin coaching visits with Beginning Teachers • Second induction program session for Beginning Teachers (2 hours) • Program Coordinators meet with Instructional Coaches
October	• Program Coordinators schedule observations and post conference discussions with all Beginning Teachers and building level instructional coaches.
November	• Program Coordinators finish in class observations and post observation discussions with all Beginning Teachers and Instructional Coaches. • Third induction program session for Beginning Teachers (2 hours)
December & January	• Instructional Coaches and Principals provide opportunities for beginning teachers to observe Master Teachers • Program Coordinators observe Beginning Teachers in PLCs for feedback and support
February	• Induction Coordinators complete second round of in class observations and post observation discussions with all Beginning Teachers and Instructional Coaches. • Fourth and final induction program session (2 hours)

Orientation

A one-day orientation took place for all incoming teachers to the district before the start of the study and before students arrive in the month of August. This included beginning teachers and those with varying years of experience. The district's vision, policies, procedures, and expectations were presented to first-year teachers, along with an introduction to key district personnel that was available for assistance and additional support.

Brief professional development opportunities were interwoven in the orientation schedule to address classroom management, lesson planning (instruction), and building relationships (student engagement). The role of the orientation session in the overall

induction program was to familiarize teachers with the variety of relevant topics associated with the teaching profession.

Coaching Support

The coaching portion of the induction program was subject to the needs of the individual beginning teacher. Research shows that most of an effective teachers' daily tasks and responsibilities are aligned in some way with planning and implementing high-yield instructional strategies, enhancing student engagement, or designing and implementing effective classroom management techniques (Tschannen-Moran & Hoy, 2001). Therefore, coaching support should be available to beginning teachers in each of the three domains as needs arise. The induction program included at least one coaching session for all beginning teachers with one of the induction program coordinators. The coaching sessions were scheduled by the beginning teacher to receive feedback on an activity within a domain of their choice.

Beginning teachers had the opportunity to request more coaching sessions from the program coordinators if needed. Additionally, instructional coaches are assigned to each building in the district for additional support. School instructional coaches are district supplied non-evaluative positions. Instructional Coaches are considered master teachers in the district, and their role is to feedback and support to all teachers in the building. Every beginning teacher who participated in the study had a building level instructional coach available to them for additional support as needed.

The coaching portion also consisted of the program coordinators conducting two classroom observations and post observation discussions with beginning teachers for feedback and support. The program coordinators also discussed classroom observation

data with the building instructional coach so that further support could be provided if needed. The coaching portion of the program was designed to be flexible to allow beginning teachers to receive individualized support.

Ongoing Professional Development

Ongoing professional development was designed and delivered by the Program Coordinators as an intentional effort to build beginning teacher capacities in critical areas during their first year with the district. Beginning teachers were required to attend four support sessions from September 2019 through February 2020. Topics related to authentic challenges most beginning teachers experience in classroom management support, managing diverse classrooms, curriculum planning, and building relationships were provided throughout the induction. Learner outcomes were created based on data collected in the reconnaissance phase and literature on effective induction practices. Table 3.2 displays the learner outcomes that were used in the development of ongoing professional development to influence teacher efficacy.

At the conclusion of each professional development session, beginning teachers completed a session evaluation (see Appendices B). Information from the session evaluations was used to make adjustments to the induction program as needed. Adjustments were made in consultation with the induction program coordinators and the data collector.

Table 3.2

Outcomes used in Ongoing Professional Development Sessions

Learner Outcomes	• Teachers will identify the steps of planning a lesson using the Instructional System and Process Model. • Teachers will create a set of expectations and procedures that will build strong classroom community. • Teachers will create a respectful classroom environment, focused on high expectations for all students. • Teachers will establish effective instructional and non-instructional classroom procedures. • Teachers will provide effective behavior supports, focused on positive, proactive, research-based strategies. • Teachers will identify student engagement strategies that increase student learning. • Teachers will explain the benefits of active student engagement. • Teachers will design lessons using student engagement strategies • Teachers will examine research-based instructional strategies that affect student achievement • Teachers will identify various methods for implementing research-based instructional strategies that affect student achievement • Teachers will determine which strategies they will incorporate in their classroom practice to increase student learning

Ongoing professional development also included online resources and support. A Google Classroom was created where the program coordinators shared research articles and various resources related to the three domains. Teachers also used this space to collaborate and share their experiences implementing strategies learned in the face-to-face professional development sessions.

Evaluation Phase

According to Ivankova (2015), the goal of the evaluation phase of the MMAR study is to collect evidence of the intervention's effectiveness. The evaluation stage of

this study occurred in February 2020, after completion of the five-month induction intervention. In this stage, quantitative and qualitative data was used to inform me of the effectiveness of the beginning teacher induction program and to determine potential changes to the intervention implemented in the action phase. Data was gathered in this stage using closed-ended surveys, interviews with the induction program coordinators, as well as a focus group session with teachers who complete the closed-ended surveys. Data collected and analyzed during the action phase were used during the evaluation phase for triangulation. Finally, data analysis was presented to the WPSD student learning team and building principals to plan and determine future actions. As a reminder, the research questions for the evaluation phase are:

Evaluation Phase Quantitative Research Questions

- What are the self-efficacy scores of beginning teachers in the WPSD as measured by the TSES following participation in the district induction program?

Evaluation Phase Qualitative Research Questions

- How do teachers perceive the impact of a beginning teacher induction on their self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

Data Collection

During the evaluation phase of the study, quantitative and qualitative data was gathered sequentially to determine the effectiveness of the induction program's efforts to improve beginning teacher's self-efficacy in the domains of instructional strategy, student engagement, and classroom management. The advantage of collecting data sequentially is

the opportunity it provides to explore initial quantitative data in more detail as well as the flexibility available in the qualitative strand based on the outcomes of the first quantitative strand (Ivankova, 2015). Quantitative data were collected through the TSES closed-ended survey in which teachers rate their sense of self-efficacy for the prescribed domains: instruction, student engagement, and classroom management (see Appendix A). Following the TSES quantitative data collection and analysis, the data collector collected qualitative data through an interview with the program coordinators, and a single focus group session with teachers who completed the induction program. A schedule of data collection gathered in the evaluation phase is displayed in Table 3.3.

Table 3.3

Evaluation Phase Data Collection

Data source	Data collected	Sample	Collection period
Teacher efficacy scale (TSES)	Teachers' self-efficacy	Teachers	February 2020
Coordinator Interview	Program Plan and implementation	Induction Program Coordinators	February 2020
Teacher focus group	Teacher efficacy induction program impact	Teachers	February 2020

Data Analysis

Data analysis in the evaluation phase was conducted in stages according to individual data collection schedule and type. Unique analysis procedures for each strand of qualitative, quantitative, and mixed methods data were used. Data that is analyzed in the evaluation phase of the study were used for comparison to data collected in earlier phases.

Quantitative data analysis. Quantitative data analysis in the evaluation phase includes responses from the TSES. The TSES is sectioned into three construct domains, each with eight items that address the construct. The mean efficacy responses were calculated for each construct. A dependent t-test was used to determine if any difference between the teachers' pretest and posttest was significantly different from zero (i.e., no change in self-efficacy). Responses from the initial stage of the reconnaissance phase were used to compare to responses in the evaluation phase to assist in answering the research question.

Qualitative data analysis. Program coordinators' comments and documents gathered during semi-structured interviews were analyzed to describe the program guidelines and used to determine alignment to best practices. Additionally, teacher comments gathered in the focus group were used to analyze the impact of participation in the induction program through the lens of beginning teacher perceptions. Data were organized and prepared for analysis by transcribing comments from the coordinator interviews and teacher focus group. Analysis of the transcriptions was used to reveal trends and themes concerning the quality of influence the program had on beginning teachers. Qualitative data was analyzed using Dedoose computer software, which assisted the data collector in coding, organizing, and analyzing themes of various data sets. Open coding was used to develop categories of information, and a codebook was developed (Corbin & Strauss, 2008). Data from the coordinators' interview and the teacher focus group supports the research question.

Quantitative Findings

The quantitative data collected in the evaluation phase of the study included induction program ongoing professional development evaluations and the administration of the TSES to participating teachers. In this study, the TSES provided insight on how participation in a beginning teacher induction program influenced teachers' self-efficacy in the domains of instruction, student engagement, and classroom environment. The survey was administered via the online survey administration tool Qualtrics to participating teachers at the conclusion of the research through a link provided via email correspondence. Baseline data collected during the reconnaissance phase provided a comparison.

Reliability. The TSES post-test had excellent internal consistency (Cronbach alpha=.934)

Overall self-efficacy. The self-efficacy of participating teachers in the reconnaissance phase was in the medium range (*M*= 5.42). Post-intervention results indicated an increase in beginning teachers' self-efficacy beliefs. The overall mean for all 41 subjects in the evaluation phase of the study was 7.01, indicating that beginning teachers possess high self-efficacy after participating in the induction program. The results from the pre-test (M = 5.42, SD = 0.92) and post-test (M = 7.01, SD = 0.77) TSES indicate a statistically significant increase in mean self-efficacy between the start and end of the beginning teacher induction program, $t(40) = -9.079$, $p < .001$. Table 3.4 displays a comparison of pre- and post-intervention TSES scores.

Table 3.4

Pre- and Post- TSES Self-Efficacy Ratings

	Pre-Intervention		Post-Intervention		Difference	
Item	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Item 1	5.37	1.13	6.46	1.57	+1.09	+0.44
Item 2	5.41	1.24	6.76	1.24	+1.43	0.00
Item 3	5.51	1.31	6.76	1.20	+1.35	-0.11
Item 4	5.51	1.34	6.39	1.16	+0.88	-0.18
Item 5	6.37	1.36	7.68	1.23	+1.31	-0.13
Item 6	6.39	1.12	7.61	1.16	+1.22	+0.04
Item 7	5.20	1.36	7.41	1.28	+2.21	-0.08
Item 8	5.49	1.38	7.51	1.10	+2.02	-0.28
Item 9	5.39	1.36	7.17	1.20	+1.78	-0.16
Item 10	5.10	1.39	7.29	1.08	+2.19	-0.31
Item 11	5.17	1.53	6.71	1.36	+1.54	-0.17
Item 12	5.56	1.47	6.88	1.17	+1.32	-0.30
Item 13	5.54	1.10	7.07	1.19	+1.53	+0.09
Item 14	5.15	1.41	6.61	1.28	+1.46	-0.13
Item 15	5.29	1.35	6.49	1.33	+1.20	-0.02
Item 16	5.37	1.13	7.20	1.25	+1.83	+0.12
Item 17	5.02	1.41	7.07	1.08	+2.05	-0.33
Item 18	5.20	1.79	7.12	1.12	+1.92	-0.67
Item 19	5.34	1.13	7.07	1.31	+1.73	+0.18
Item 20	5.78	1.46	7.34	1.11	+1.56	-0.35
Item 21	5.29	1.55	6.76	1.32	+1.47	-0.23
Item 22	5.39	1.41	6.78	1.13	+1.39	-0.28
Item 23	5.15	1.30	6.93	1.19	+1.78	-0.11
Item 24	5.22	1.57	7.12	1.17	+1.90	-0.40

Instructional strategies. Table 3.5 displays a comparison of pre- and post-intervention TSES items in the instructional strategies domain from the teachers who completed the survey. The results from the pre-test (M = 5.23, SD = 1.18) and post-test (M = 7.13, SD = 0.90) TSES indicate a statistically significant increase in the confidence

of beginning teachers' use of instructional strategies that lead to student success between the start and end of the beginning teacher induction program, $t(40) = -8.835$, $p < .001$.

Table 3.5

Pre- and Post- TSES Self-Efficacy Ratings for Instructional Strategies

	Domain Mean	Item 7	Item 10	Item 11	Item 17	Item 18	Item 20	Item 23	Item 24
Pre-intervention	5.23	5.20	5.10	5.17	5.02	5.20	5.78	5.15	5.22
Post-Intervention	7.13	7.41	7.29	6.71	7.07	7.12	7.34	6.93	7.12
Difference	+1.90	+2.21	+2.19	+1.54	+2.05	+1.92	+1.56	+1.78	+1.99

The mean value for each item in the survey related to the use of high yield instructional strategies increased. The highest mean value increase corresponded to item seven, which asked participants to what extent they can respond to difficult questions from their students. Thirty-seven teachers (90%) indicated they had a high ability to address student questions during the evaluation phase, as compared to 14 teachers (34%) in the reconnaissance phase.

Mean values had the lowest increase in item eleven when teachers were asked to what extent they can craft good questions for their students. During the evaluation phase, thirty-two teachers (78%) indicated high self-efficacy in this area compared to 41% of teachers (17) in the reconnaissance phase. No teacher in the evaluation phase indicated a low level of self-efficacy for any item related to the implementation of instructional strategies.

Student engagement. Table 3.6 displays a comparison of pre- and post-intervention TSES items in the student engagement domain from the teachers who completed the survey. The results from the pre-test ($M = 5.52$, $SD = 0.99$) and post-test ($M = 6.83$, $SD = 0.90$) TSES indicate a statistically significant increase in the confidence

of beginning teachers' ability to engage students in a way that leads to student success between the start and end of the beginning teacher induction program, $t(40) = -7.312$, $p < .001$.

Table 3.6

Pre- and Post- TSES Self-Efficacy Ratings for Student Engagement

	Domain Mean	Item 1	Item 2	Item 4	Item 6	Item 9	Item 12	Item 14	Item 22
Pre-intervention	5.52	5.37	5.41	5.51	6.39	5.39	5.56	5.15	5.39
Post-Intervention	6.83	6.46	6.76	6.39	7.61	7.17	6.88	6.61	6.78
Difference	+1.31	+1.09	+1.35	+0.88	+1.22	+1.78	+1.32	+1.46	+1.39

The mean value for each item in the survey related to student engagement techniques increased. The highest mean value increase corresponded to item nine, which asked participants how much they can do to help their students value learning. Thirty-eight teachers (93%) indicated they had a high ability to help students value learning during the evaluation phase, as compared to 20 teachers (49%) in the reconnaissance phase.

Mean values had the lowest increase in item four when teachers were asked to what extent they can motivate students who show low interest in schoolwork. During the evaluation phase, twenty-nine teachers (71%) indicated high self-efficacy in this area compared to 56% of teachers (n=23) in the reconnaissance phase. Five teachers in the evaluation phase indicated a low level of self-efficacy for at least one item related to student engagement.

Classroom management. Table 3.7 displays a comparison of pre- and post-intervention TSES items in the classroom management domain from the teachers who completed the survey. The results from the pre-test ($M = 5.52$, $SD = 0.95$) and post-test

(M = 7.07, SD = 0.83) TSES indicate a statistically significant increase in the confidence of beginning teachers' ability to implement effective classroom management systems that lead to student success between the start and end of the beginning teacher induction program, $t(40) = -8.079$, $p < .001$.

Table 3.7

Pre- and Post- TSES Self-Efficacy Ratings for Classroom Management

	Domain Mean	Item 3	Item 5	Item 8	Item 13	Item 15	Item 16	Item 19	Item 21
Pre-intervention	5.52	5.51	6.37	5.49	5.54	5.29	5.37	5.34	5.29
Post-Intervention	7.07	6.76	7.68	7.51	7.07	6.49	7.20	7.07	6.76
Difference	+1.55	+1.25	+1.31	+2.02	+1.53	+1.20	+1.83	+1.73	+1.47

Like the instructional strategy and student engagement domains, the mean value for each item in the survey related to classroom management increased. Items 8 had an increase of over 2. Item 8 asked participants how well they could establish routines to keep activities running smoothly. Thirty-nine teachers (95%) indicated they had a high ability to establish such routines during the evaluation phase, as compared to 20 teachers (49%) in the reconnaissance phase.

Mean values had the lowest increase in item three when teachers were asked to what extent they can control disruptive behavior in the classroom. During the evaluation phase, thirty-four teachers (83%) indicated high self-efficacy in this area compared to 54% of teachers (n=22) in the reconnaissance phase. Two teachers in the evaluation phase indicated a low level of self-efficacy for one item related to student engagement.

Qualitative Data

Qualitative data collected in the evaluation phase of the study was used to provide additional understanding of the quantitative data, inform me of further study needed, and

provided insight for the monitoring phase of the study. A semi-structured interview with the district program coordinators was conducted along with a focus group comprised of 6 teachers who completed the induction program. Scripted interview and focus group protocols were developed by me (see Appendices E & F) to guide the data collector. The interviews and focus group occurred at the conclusion of the induction activities. The sessions were audio-recorded using software on the data collector's personal computer.

Program coordinator conversations. Conversations with the program coordinators commenced at the start of the teacher induction sessions (action phase) and included email exchanges and face to face conversations. Data collected from coordinator conversations include dialogue between the program coordinators and the data collector and reflective conversations between the program coordinators and me.

Coordinator conversations present an accurate account of how the induction program unfolded. Conversations over the six-month study period allowed me to collect unique or unexpected information that arose during the induction program implementation, ensure that the program was delivered as it was designed in the planning phase, understand beliefs that teacher had about their self-efficacy, and explore potential program changes that need to take place over time. Dialogue of participant teacher commentary and discussions was collected throughout the study period and were stored separately in a password-protected area on the data collector's personal computer. Commentary from coordinator conversations support answering the research question.

Participant focus group. A focus group was conducted one week after the response time-window for the TSES closed. All beginning teachers in the study were

invited to participate in the focus group. Seven teachers (three elementary, three middle, and one high school) volunteered to participate.

In the focus group, the data collector asked teachers to reflect on how the induction program assisted in their ability to implement high yield instructional strategies, authentically engage students, and efficiently develop classroom management systems that lead to student success. Participating teachers were asked how the program might better support future beginning teachers in these areas as an exploratory line of questioning.

I collaborated with the data collector to develop a systemic process for labeling participant responses during the focus group session. The data collector evaluated teacher responses and applied a numeric label. The label 0 signified the induction program had "very little or no" positive impact in the teacher's skillsets in the specified domain. Keywords and phrases "none," "it didn't," or "very little" served as distinguishing markers for the label of a 0. If the teacher indicated that the induction program had "a little" or "some" positive influence, the response was labeled as 1. When teachers indicated a significant positive impact on their development in a specific domain, a designation of 2 was given. Table 3.8 below displays the ratings given for the seven teachers who participated in the focus group.

Table 3.8

Teacher Perceptions of the Induction Program's Impact by Construct

Construct	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Teacher 6	Teacher 7
Instructional strategies	1	0	2	0	1	1	0
Student engagement	1	0	0	1	1	1	0
Classroom management	0	0	2	1	2	1	1

Note. *A "0" represents "very little or no" impact, a "1" indicates "little to some" positive impact, and a "2" represents a significant positive impact.

Instructional strategies. All focus group teachers agreed that the coaching sessions were an impactful component of the induction program by providing valuable resources for instruction while assisting and providing feedback on implementation. The induction plan included at least one coaching session for beginning teachers led by one of the induction program coordinators. Beginning teachers had the opportunity to request more coaching sessions from the program coordinators if needed. Instructional coaches were also assigned to each building in the district for additional support. One teacher described a significantly positive relationship between the induction experiences and their implementation of high yield instructional strategies. This was attributed to the induction coordinator assisting the teacher during scheduled coaching sessions.

Two teachers accredited the positive impact that the induction program had on them to the coaching sessions held throughout the program. Another teacher indicated the induction program had little impact on implementation of high yield instructional strategies because of the limited nature of interaction the teacher had with her program coordinator. Another teacher agreed, stating she only talked to the program coordinator once, in the first few weeks of the program.

One teacher gave a significantly positive response concerning the program's ability to enhance her development of implementing high yield instructional strategies, which the teacher directly attributed to the in-person professional development sessions held four times throughout the program. Another teacher also referenced the professional development sessions as beneficial but gave a generally low rating to the program's impact on her development of implementing high-yield instructional strategies. The description of these sessions specified that teachers received "support related to the district pacing guides, the district instructional process, instructional best practices, and resources for specific content areas." While instructional strategies were shared throughout the program, opportunities for assisted implementation and feedback were limited.

One of the four professional development modules focused exclusively on designing high-quality instruction. Instructional strategies were covered in the session and woven into other sessions as well. Coaching sessions were used to provide personalized support to beginning teachers. All teachers in the focus group mentioned coaching, and the ongoing professional development sessions had a positive impact on their growth in the ability to implement high yield instructional strategies.

Student engagement. The data collector asked members of the focus group to describe how their experiences in the induction program impacted their perceived ability to maintain student engagement throughout a lesson. Three of seven teachers stated that the induction program did not influence their ability to engage students. One teacher stated, "I feel like student engagement was talked about the least of everything. Honestly, I can't remember anything specific regarding student engagement." Another teacher

added, “I don’t think so. I remember we were given a few strategies in a round robin type setting and I remember thinking that some of them were good. That was early on in the school year and I think at that time, we were so inundated with so much stuff that we didn’t retain as much as we could have.”

Four teachers indicated “little” to “some” positive impact on their ability to engage students through an entire lesson. One teacher stated, “I used some of the ideas that other members of my group shared in lessons in my own classroom. This allowed me to maintain student engagement on several occasions.”

Three teachers shared the same thought about the coaching sessions. The support provided during the coaching was conveyed as a strength of the program. However, all three teachers attributed the positive impact to the relationships they developed with the program coordinator and the instructional coached in their building.

Student engagement was the lowest-rated construct of the three. No teacher claimed a significant influence on their ability to engage students in their class. Three of the four teachers who reported some impact on their engagement skills attributed their growth to the coaching experiences they received.

Classroom management. Through the data collector, I asked teachers to describe in what ways the induction program assisted them in developing effective classroom management strategies. Teachers generally offered a more positive perception of the role induction played in acquiring classroom management skills. Three of the seven teachers indicated “little” or “some” positive impact.

Two teachers used the word “helpful” when describing the impact; the induction program had on their ability to manage a diverse classroom. This keyword signified a

significant positive influence on teacher development. Another teacher had positive statements regarding the program's impact on her management techniques. This teacher gained her certification through an alternative program, meaning she did not have the benefit of completing a teacher preparation program nor a student teaching experience and expressed gratitude for the classroom management focus of the induction program.

Another teacher described the program as helpful in developing her management ability. He explained that he received a large packet of handouts that he wished he had known for classroom management procedures. Her final statement concerning the impact of program elements related to management was, "We were given a packet- good stuff on things I wish I'd known like procedures, examples . . . I've not looked at any of that." Therefore, although this teacher described the program as "helpful" and its resources as "good" which implied a significant positive impact, the teacher admitted to never utilizing any of the strategies offered through the program.

Three teachers acknowledged management techniques discussed during induction meetings, but one stated that it was difficult to acquire new strategies in a room with a wide variety of teachers with differing types of classrooms. Although this teacher used the term "helpful" when describing the classroom management training in the professional development session, she then added,

> It was also redundant from some of the other trainings I participated in and graduate classes I was required to take. I do not specifically remember using any of these strategies in my classroom during lessons. This is partly because the training seemed to be designed for elementary school teachers. I teach high school and all of my classes are different. I found it hard to apply a lot of the strategies presented in my setting.

Another teacher accredited her instructional coach with sharing best practices during their coaching conversations. According to this teacher, coaching sessions were

led by the beginning teachers who shared problems they were having in a particular domain with the program coordinators and the building instructional coach. She described coaching sessions as "a great discussion and problem-solving session." This teacher elaborated to explain that the coach "share some best practice, and in some instances observe the implementation of the shared practice and provide feedback for improvement."

Two teachers indicated that the program had no positive impact on their classroom management skill development. One teacher worked in an elementary classroom as an instructional assistant before earning her teacher certification. She shared that through her experience as an instructional assistant, she acquired an understanding of procedures, systems, and setting behavior expectations to efficiently operate a classroom. Having prior classroom experience made the program seem less valuable to her. While she hoped to learn innovative strategies to effectively manage her class, she experienced a repeat of simple principles that she had learned as an assistant. She explained, "I didn't learn anything that I didn't already know. I mean, just basic, clear expectations and, routine, routines, routines at the beginning of the year."

Focus group summary of results. Teachers who participated in the focus group reported that classroom management skills were most impacted by the program, followed by instructional strategies. The ability to keep students engaged throughout a lesson was least impacted by the program. An analysis of teacher responses concluded that coaching sessions were viewed as the most beneficial aspect of the program.

Teachers reported that the program most positively impacted their ability to develop and implement effective classroom management systems, followed by

implementing high yield instructional strategies to increase student success. Student engagement was described as least supported by the induction program, with three teachers stating that student engagement was not addressed at all and four teachers describing "little to some" degree of limited support. Teachers in the focus group collectively perceived little or no support in instructional strategies, student engagement, and classroom management provided by the program.

Meta Inferences

This section discusses inferences made from qualitative and quantitative data analysis. The increase in beginning teacher self-efficacy in instruction, engagement, and classroom management at the end of the induction program compared to the beginning of the program is undeniable. The qualitative data collected from the teacher focus group session indicates the degree to which deliberate attention were given to each construct should be examined to evaluate how well the program structure supports increasing self-efficacy in instructional strategies, student engagement, and classroom management.

Program Alignment to the Three Constructs

Instruction. The district's effort to support beginning teachers in instruction focused on the in person professional development sessions designed to ensure that all essential elements of the instructional process were understood by beginning teachers throughout the program to provide support related to curriculum, pacing, best practices, and resources. One of the ongoing professional development sessions in the google classroom was dedicated to "Curriculum Planning." Regarding instruction, the program demonstrates a purposeful effort to address this construct through multiple lesson planning sessions with the program coordinators and the instructional coaches. With

respect to supporting teachers' ability to effectively deliver the information to students, the program provides beginning teachers with support from the program coordinators and the building instructional coaches to share resources and best practices.

Individual coaching sessions could address the constructs; however, there is no evidence of set agendas or accountability to cover specific topics. These sessions are designed to be flexible to respond to beginning teacher needs. There is no evidence of deliberate support in lesson delivery skills, such as techniques to build background knowledge and strategies to help students retain vocabulary terms. It is possible, however, that instructional coaches and program coordinators offer support at a more individualized level.

The program was designed to address critical issues with which all beginning teachers struggle through professional development and orientation. More individualized, less-structured support is offered through the coaching sessions. The number of coaching sessions that beginning teachers received was determined by the beginning teacher. If the beginning teachers indicate a need for coaching support in the area on instruction, the program guidelines dictated that the program coordinators and the instructional coach would provide the necessary support. The professional development sessions focused on instruction were aimed at planning and curriculum pacing. Coaching sessions are designed to meet teachers' individualized needs regarding instructional best practices. Therefore, I determined that the program made a purposeful effort to address the instructional construct.

Student engagement. Support for student engagement was present in the program design, but the scope is limited to relationship building. All seven teachers in the

focus group perceived a clear lack of attention given to engagement and expressed disappointment that they were not supported with professional development dedicated to maintaining student engagement during instructional activities. When comparing professional development opportunities dedicated to instructional practices, student engagement is noticeably less of a focus. A professional development session entitled, "Engaging Students in Learning" occurred early in the program. This professional development session was relevant to student engagement; however, no structured professional development aimed at specific strategies beginning teachers can implement to engage students was evident.

As previously discussed, coaching and mentor sessions were intended to provide support specific to individual beginning teacher needs. If engagement is a struggle for a beginning teacher, the instructional coach or program coordinator should offer resources and best practices. The instructional coaches and program coordinators were expected to provide whatever support is necessary for the beginning teachers, including the development of strategies to maintain student attention during learning activities if the beginning teacher struggles in this area. However, if beginning teachers did not communicate this struggle, coaches nor program coordinators may not have offer strategies to the construct. Without the potential informal input from an instructional coach or program coordinator, the engagement construct is limited to two hours of in-person professional development. Therefore, I determined that the program made a limited attempt to address the construct of student engagement.

Classroom management. The induction program was purposefully designed to provide substantial support in the domain of classroom management. Most of the

professional development activities that beginning teachers participate in at the beginning of the program are designed to address classroom management. Additionally, beginning teachers are introduced to district behavioral support personnel at the orientation so they have someone to contact when counsel is needed in behavior management.

The deliberate intent to address classroom management was also evident in professional development opportunities delivered through Google Classroom. Classroom management is interspersed throughout the program to address changing needs. Management conversations such as the establishment of rules, behavior plan and consequences, and procedures were covered at the first professional development session. Beginning Teachers were also required to submit their classroom behavior plan to the program coordinators and building instructional coaches for feedback. The coaching component of the program permits flexibility to meet individual beginning teacher needs as they evolve. I determined there was a deliberate attempt to address the management construct by providing multiple professional development opportunities in systems, procedures, and processes and coaching sessions designed to meet individual teacher needs.

Summary of results. Based on the qualitative and quantitative results and descriptions and artifacts of the program, I conclude the program aligns with all three measured constructs, but the attention dedicated to student engagement is most restricted in time and scope. The program reflects a deliberate effort to address the instruction construct through multiple training sessions dedicated to implementation of the instructional process. The program coordinators share resources and best practices during in-person professional development sessions and through google classroom. Building

Instructional Coaches and program coordinators may address instructional best practices in informal settings, dependent on individual beginning teacher needs. I determined that the program demonstrates a purposeful effort to develop teacher efficacy in the implementation of high yield instructional strategies. Similarly, the induction program provides substantial support in the area of designing and implementing effective classroom management systems. I noted evidence of deliberate attention given to this construct in the form of in-person professional development sessions in systems, procedures, and processes and coaching sessions designed to respond to beginning teacher needs throughout the year. Significantly less time is dedicated to developing teacher abilities to effectively engage students to maximize student success. One in-person professional development session is aligned to the engagement construct, but the construct is limited to relationships. When compared to the professional development dedicated to the instruction construct, engagement received considerably less attention.

Monitoring

Following the evaluation phase, study results and conclusions were shared with district administrators and building principals. Together, the group developed a plan for continued implementation of a formal induction program that will positively influence teacher-self efficacy in the domains of instructional strategies, student engagement, and classroom management. Additionally, progress and revision to the program will be monitored and adjusted accordingly, depending on the study of results.

Discussion and Conclusion

Based on quantitative data of the TSES instrument, the beginning teachers who participated in the induction saw an increase of self-efficacy in all three constructs of

instruction, engagement, and management. Mean values of 6.83 in every construct indicate “quite a bit” of self-efficacy in each domain. The results of the dependent t-tests further support the conclusions that beginning teachers feel highly efficacious after participating in the program. Closer examination of data revealed lower levels of self-efficacy improvement in communicating clear expectations for student behavior (+0.88), getting through to difficult students (+1.09), calming a student who is disruptive (+1.20), and getting students to believe they can do well (+1.22). Several positive trends emerged, such as teacher confidence in their ability to respond to difficult questions from students (+2.21), gauge student comprehension of what is taught (+2.19), and adjust lessons to the proper level for individual students (+2.05).

I strived to view the program’s effectiveness through the lens of a teacher by coordinating a focus group session for interested participants who completed the program. Despite the overwhelming qualitative results, the comments from the focus group participants were not as promising. Teachers in the focus group reported that developing effective classroom management systems were most impacted by their participation in the induction program, followed by the implementation of high-yield instructional strategies. Teachers also communicated that the ability to engage students was least impacted by the induction program. Collaboration with others was viewed as a strength of the program, but teachers noted the lack of support in instructional delivery and engagement strategies. Most teachers pointed to coaching sessions as the most valuable aspect of the program. Teachers described feeling bombarded by handouts during program coordinator facilitated professional development. Teachers wanted

increased opportunities for interactive feedback from program coordinators and instructional coaches.

Through conversations with the Induction Program Coordinators and by reviewing the evaluation forms completed by participants in the professional development sessions, I found evidence that best practices were present to some degree. An orientation demonstrates an effort to familiarize beginning teachers to the district's mission, aspirations, core values, policies, and procedures. An effort was made to establish coaching guidelines, develop accountability measures for beginning teachers through google classroom reflections, and deliver relevant in-person professional development. The intended focus of this induction professional development was to support teachers in classroom management and lesson planning. I, along with the Induction Program Coordinators, acknowledge the lack of rigorous professional development in student engagement compared to instruction and management. The program's attention to student engagement was restricted to a two-hour after-school professional development session on building positive relationships.

The induction program addressed all three measured constructs, but the attention dedicated to student engagement was limited in time and scope. There was deliberate effort to address the instruction construct through rigorous professional development in lesson planning and curriculum pacing. Content area specialists shared resources and best practices during two, 3-hour professional development sessions.

Program Coordinators and Instructional Coaches addressed instructional strategies in informal settings, dependent on individual beginning teacher needs. There

were multiple formal professional development sessions in classroom management systems, procedures, and processes designed to respond to teacher needs.

In conclusion, I learned that a beginning teacher induction program is a promising practice to increase teachers' self-efficacy at Williamstown Public School District. Results of the study indicated positive influences for beginning teachers' efficacy to implement high-yield instructional strategies, effectively engaging students, and design classroom management systems to impact student success. Although the induction program was influential in the overall improvement in the self-efficacy of beginning teachers' adjustments to the program are needed to better address engaging students in learning activities. For instance, more focus is needed on developing beginning teachers' ability to authentically engage students in learning. Gain scores on the TSES were lower in this domain than other areas measured and was the most significant issue discussed in the focus group.

As to whether everything addressed in this study will account for teachers remaining in the district year to year remains to be seen. Other factors contribute to the retention of beginning teachers which were not addressed in this effort. The culture and climate, district and school initiatives, and financial incentives play a role in teacher retention. Teachers need to feel a level of excitement about the vision and direction of the school and district that they are a part of in addition to feeling self-efficacious about their work.

Findings from this action research study serve as a foundation for further investigation at Williamstown Public Schools. Due to the rising attrition rates in the district, a quantitative study is necessary to establish an average attrition rate over a more

extended period of time. WPSD should determine how to best support beginning teachers beyond a first-year induction program. The district should perform an analysis of multiple data sources to establish financial and student achievement costs related to attrition. Future study should include an evaluation of the induction program's impact on student achievement; reducing achievement gaps, and reducing teacher attrition rates.

APPENDIX A

Teacher Sense of Self-Efficacy (TSES) Survey

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

1	2	3	4	5	6	7	8	9
None at all		Very Little		Some Degree		Quite a Bit		A Great Deal

Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) None at all to (9) A great deal as each represents a degree on the continuum.

1. How much can you do to get through to the most difficult students?
2. How much can you do to help your students think critically?
3. How much can you do to control disruptive behavior in the classroom?
4. How much can you do to motivate students who show low interest in school work?
5. To what extent can you make your expectations clear about student behavior?
6. How much can you do to get students to believe they can do well in school work?
7. How well can you respond to difficult questions from your students?
8. How well can you establish routines to keep activities running smoothly?
9. How much can you do to help your students value learning?
10. How much can you gauge student comprehension of what you have taught?
11. To what extent can you craft good questions for your students?
12. How much can you do to foster student creativity?
13. How much can you do to get children to follow classroom rules?
14. How much can you do to improve the understanding of a student who is failing?
15. How much can you do to calm a student who is disruptive or noisy?
16. How well can you establish a classroom management system with each group of students?
17. How much can you do to adjust your lessons to the proper level for individual students?
18. How much can you use a variety of assessment strategies?
19. How well can you keep a few problem students from ruining an entire lesson?
20. To what extent can you provide an alternative explanation or example when students are confused?
21. How well can you respond to defiant students?
22. How much can you assist families in helping their children do well in school?
23. How well can you implement alternative strategies in your classroom?
24. How well can you provide appropriate challenges for very capable students?

APPENDIX B

Professional Development Session Evaluation

Date: _____	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Content					
1. The objectives for today's session were clearly stated.	▭	▭	▭	▭	▭
2. Today's session was aligned to its stated objectives.	▭	▭	▭	▭	▭
3. Today's session was useful and practical.	▭	▭	▭	▭	▭
4. Today's session advanced the overall development of my teaching capacity.	▭	▭	▭	▭	▭
Process					
5. Today's activities (presentations, scenarios, group exercises, etc.) increased my capacity to use data to improve my practice.	▭	▭	▭	▭	▭
6. Today's activities (presentations, scenarios, group exercises, etc.) increased my capacity to use high yield instructional strategies in my classroom.	▭	▭	▭	▭	▭
7. Today's activities (presentations, scenarios, group exercises, etc.) increased my capacity to use highly effective student engagement techniques.	▭	▭	▭	▭	▭
8. Today's activities (presentations, scenarios, group exercises, etc.) increased my capacity to develop and implement classroom management systems.	▭	▭	▭	▭	▭
9. The facilitators of today's session effectively modeled appropriate instructional strategies.	▭	▭	▭	▭	▭
10. The facilitators of today's session incorporated our experiences into today's activities (presentations, scenarios, group exercises, etc.)	▭	▭	▭	▭	▭
11. Time was allocated effectively today to deepen my understanding of the presented material.	▭	▭	▭	▭	▭
Context					
12. There were opportunities during today's session to collaborate on shared activities.	▭	▭	▭	▭	▭
13. Today's activities (presentations, scenarios, group exercises, etc.) were relevant for my job-related needs.	▭	▭	▭	▭	▭
14. Today's sessions advanced my understanding of how to engage in a continuous improvement cycle.	▭	▭	▭	▭	▭
15. The organization of the learning environment (facilities, tools, materials, participant groupings, etc.) met my learning needs.	▭	▭	▭	▭	▭

APPENDIX C

Administrator Interview Guiding Questions

1. As you reflect on your experience supporting beginning teachers in your building, how well do you think they were prepared for the challenges of teaching their own class?

2. In what ways could the district better support beginning teachers in their first year of teaching in WPSD?

3. Looking back over your experience working with beginning teachers, in what areas do you feel beginning teachers need the most support?

4. How do you specifically seek to develop beginning teachers' instructional skills?
    a. How do you know if you are being successful in developing instructional skills?
    b. What specific support do beginning teachers need to increase their ability to implement high yield instructional activities in their classroom?

5. How do you specifically seek to develop beginning teachers' ability to engage students in learning?
    a. How do you know if you are being successful in successful in developing teachers' ability to engage students?
    b. What specific support do beginning teachers need to increase student engagement in their classroom?

6. How do you specifically seek to develop beginning teachers' command of classroom management?
    a. How do you know if the program has been successful in developing management skills?
    b. What specific support do beginning teachers need to design and implement effective classroom management systems in their classroom?

APPENDIX D

Induction Program Coordinator Interview

The purpose of this interview is to help me gain deeper insight into the support services offered to beginning teachers in the district. As we talk, I am going to take notes, but I'd like to digitally record this interview to ensure accuracy of my notes. At your request, I will stop recording. Do I have your permission to record our interview? [Wait for affirmative verbal response.]

1. How was the program implemented?
    a. Frequency of meetings?
    b. Duration of meetings?

2. How did you specifically seek to develop beginning teachers' ability to implement high yield instructional strategies?
    a. How do you know if the program has been successful in developing teachers' ability to implement high yield instructional strategies?

3. How did you specifically seek to develop beginning teachers' ability to engage students in learning?
    a. How do you know if the program has been successful in developing teachers' ability to engage students?

4. How did you specifically seek to develop beginning teachers' effective development and implementation of classroom management systems?
    a. How do you know if the program has been successful in developing and implementing classroom management systems?

5. How did you assess or evaluate the induction sessions?
    a. Measurable objectives identified
    b. Multiple data sources – implementation and impact
    c. Data used to inform next steps

6. What would you identify as the greatest strength(s)/weakness(es) of the program?

7. In your opinion, what are the key skills we need to develop in all beginning teachers?

8. Based on research and best practices, how do you know that the induction program provides quality support to beginning educators?

9. What, if anything, would you like to improve about the program?

APPENDIX E

Focus Group Protocol

Due to the nature of sequential mixed methods design, the researcher will ask probing questions when further elaboration by the participants is necessary. Open-ended questions may be asked based upon participant responses. These questions are not conclusive because data analyses from the quantitative instrument have yet to be conducted. As statistically significant data and trends develop from the descriptive statistics, additional questions may be added.

Questions for Participants

1. How did the induction program aid in your development of instructional strategies that address student needs? (If it didn't…how might the program change to better support future beginning teachers?)

2. Please describe how the induction program experiences impacted your ability to maintain student engagement throughout a lesson? (If it didn't…how might the program improve to support future beginning teachers?)

3. In what ways did the induction program assist you in developing effective classroom management strategies? (If it didn't…how might the program change to better support future beginning teachers?)

4. How would you describe the mentoring program? (Was it helpful? Why or why not?)

5. Was your assigned mentor a good match for you? (Was your mentor from your content area?)

6. If it wasn't a good match, what actions were taken to address this and by whom?

7. What do you perceive to be the most valuable elements of your experiences in the induction program? (Why?)

8. Please describe any teacher needs you feel are not adequately addressed by the induction program.

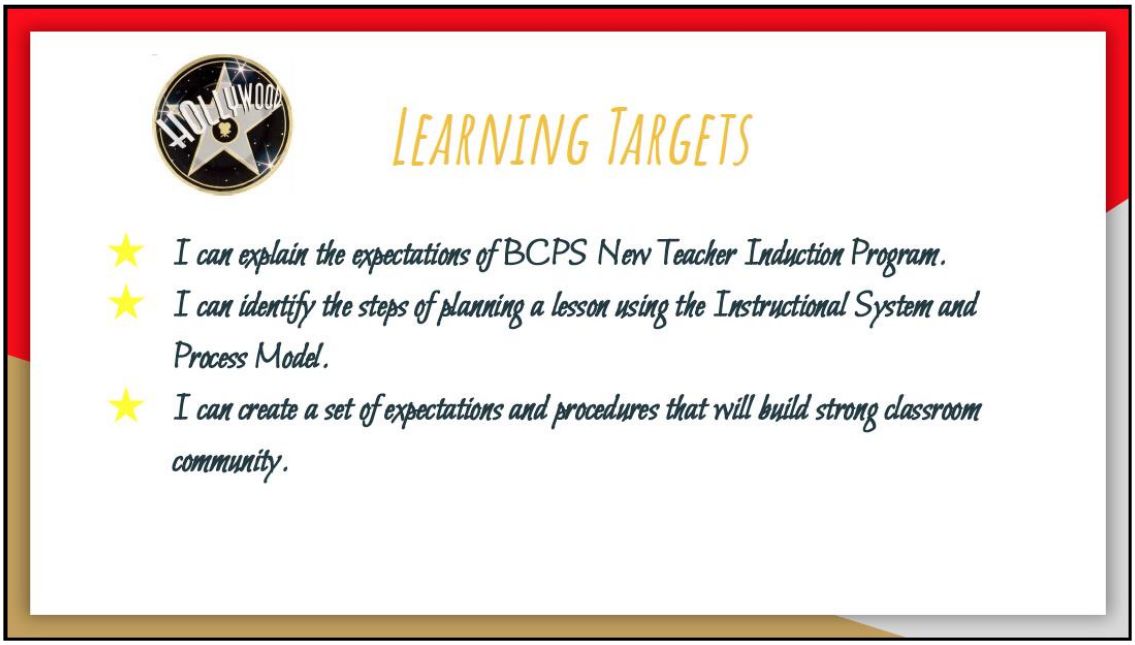
9. If you could make a suggestion to improve the beginning teacher induction program, what would it be?

10. Is there anything else you'd like to share?

****Additional questions may be added to explore quantitative data trends after TSES responses have been analyzed****

APPENDIX F

Action Phase Ongoing Professional Development Material



Supporting Roles…

2019-2020 New Teacher Induction Program

Kahoot.it … **166500**

Ready, Set, Answer!

Positive Behavior Intervention and Supports:

A Critical Component for Creating a Community of Learners

Setting the Stage……

Classroom Expectations and Procedures

Why develop a system for teaching behavior?

- Behaviors are prerequisites for academics
- Procedures and routines create structure
- Repetition is key to learning new skills:
- For a child to learn something new, it needs to be repeated on average 8 times
- For a child to unlearn an old behavior and replace it with a new behavior, the new behavior must be repeated on average 28 times (Harry Wong)

Focus on positive

- Ideally, you should have 3-5 positively stated behavior expectations. In other words, the behavior you expect to see.
- Teach what each of these look like and sound like in the different settings within your classroom.
  - Primary Example
  - Elementary Example
  - Middle School/High School Example
- Use the same engaging lesson plans for expectations that you would for content standards!

Change your Focus

- No running or goofing off
- No yelling/arguing
- Don't make a mess
- Don't wander around the room
- Don't touch others or throw objects
- No shout-outs
- No Cell Phones!

Teach to Fluency = Cultural Capital

- When teaching the classroom expectations we need to teach to FLUENCY.
- This fluency is critical because if students come from a differing backgrounds, they will need to develop Cultural Capital. That is, they will need to learn that while certain things are acceptable or encouraged in their home or neighborhood settings, a different set of expectations may apply to the classroom setting.
- These skills are not just school procedures. They include the social emotional learning targets that are necessary to be college and career ready and to develop meaningful relationships.

Research indicates that you can improve behavior by 80% just by pointing out what someone is doing correctly.

Why Do We Acknowledge Desired Behavior?

- Reinforce the teaching of new behaviors
- Behavior is likely to become a habit and recur in the future only if demonstrating it has been beneficial
- Harness the influence of kids who are showing expected behaviors to encourage the kids who are not
- Strengthen positive behaviors that can compete with problem behavior
- Improve school climate
- Create positive interactions and rapport with students

Ways to Acknowledge Positive Behaviors

Specific and Contingent Praise-Make eye contact and use behaviorally specific language. Provide immediate feedback and acknowledge appropriate behavior often.

Group Contingencies

All for one-If entire class completes work on time they all get 10 minutes free time.

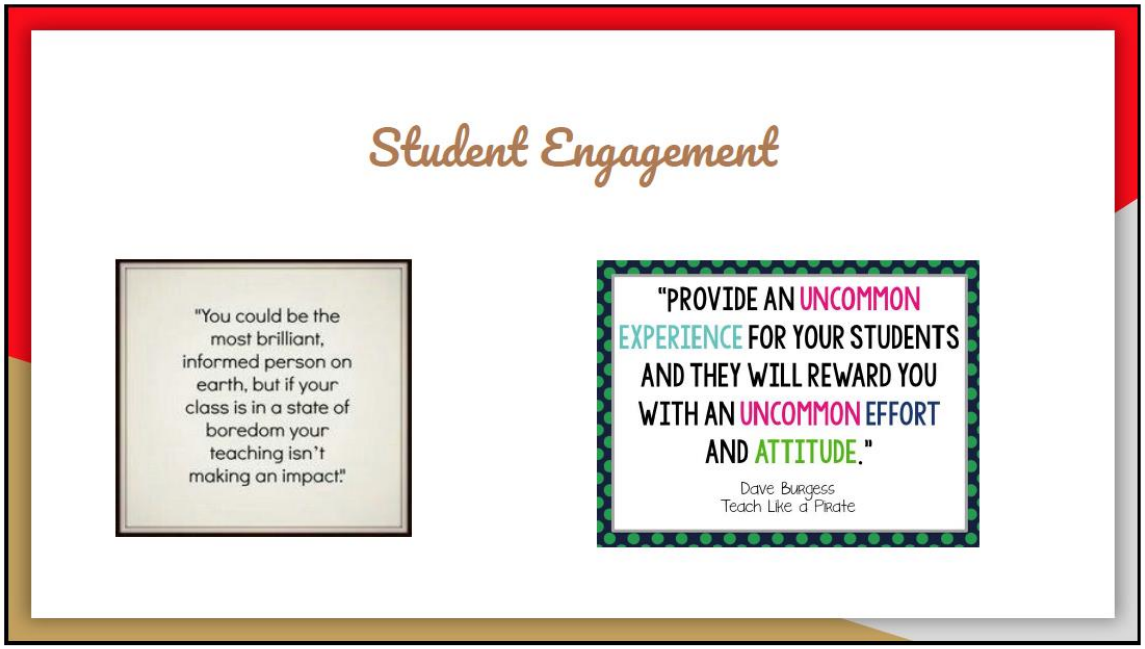
One for all-Students divided into groups. Groups earns points, and group with most points wins reward.

To each his/her own-Independent Group Contingency-everyone who earns points receives a reward.

What does 4:1 mean?

- Students should experience predominantly positive interactions (ratio of 4 positives for every negative) on all locations of school.
- Positive Interactions=
  - Behaviorally specific feedback as to what the student did right (contingent)
  - Smile, nod, wink, greeting, attention, hand shake, high five (non-contingent)
- Negative Interactions=
  - Non-specific behavioral corrections
  - Ignoring student behavior (appropriate or inappropriate)

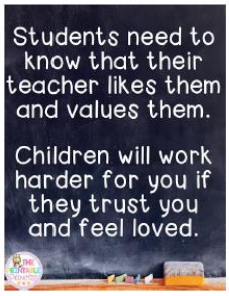
What will your classroom matrix look like?


Student Engagement
"You could be the most brilliant, informed person on earth, but if your class is in a state of boredom your teaching isn't making an impact."
"PROVIDE AN UNCOMMON EXPERIENCE FOR YOUR STUDENTS AND THEY WILL REWARD YOU WITH AN UNCOMMON EFFORT AND ATTITUDE."
Dave Burgess
Teach Like a Pirate


Bottom Line.....
Research has historically indicated strong correlations between student engagement (typically defined as attention to the area of focus, active participation in learning, and time on task) and student achievement.

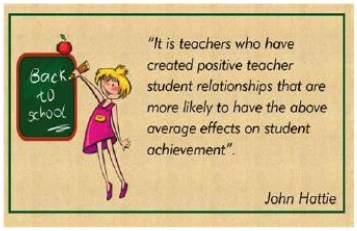
Student Engagement Activities

Reflect...



No Significant Learning occurs without a Significant relationship.

Dr. James Comer



Building Classroom Community

Turn and Talk:

Why is building a strong classroom community important at all grade levels?

Research Says.....

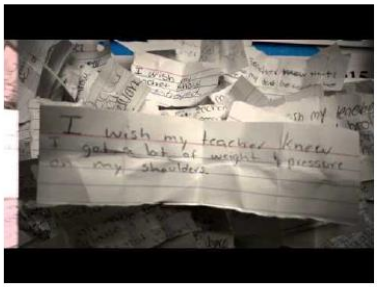
Increased trust to take academic risks

Deceased behavior issues

Feeling of ownership of their environment and learning

Model Activity

M&M Activity



Activities for Back to School That Will Jump Start a Strong Classroom Community.....

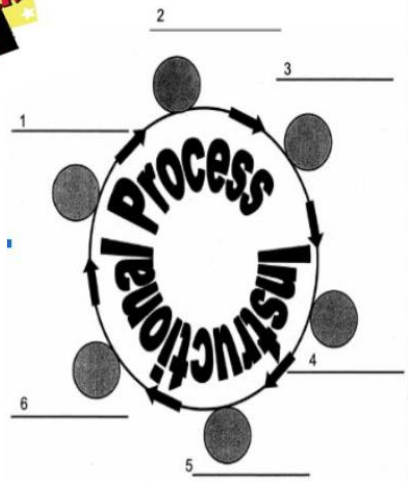
High School/ Middle School

https://docs.google.com/document/d/1PLHGdm8sZZQLIAH_hw5cJclf7wThwqcFt8Z-9assoo4/edit?usp=sharing

Activities for Back to School That Will Jump Start a Strong Classroom Community.....

Elementary

https://docs.google.com/document/d/1pZUWICkP4kPf0HTxrz9z4QOS9govMXRRV-qvBqZuP3g/edit?usp=sharing



Options

- ★ Remediation/Intervention
- ★ Assessment
- ★ Standards
- ★ Enrichment
- ★ Lesson Plans
- ★ Instruction


BCPS
Instructional Expectations


Welcome, Teachers!
Classroom Management Strategies
Session 2


Expert Panel:
Classroom distractions?
Relationship-building
Talkative Students?
Incentives/Consequences?
Active Engagement?
On-task Behaviors?
Attention-getters?
Peer Interactions?

Meet Mr. Hester….

What's Next?

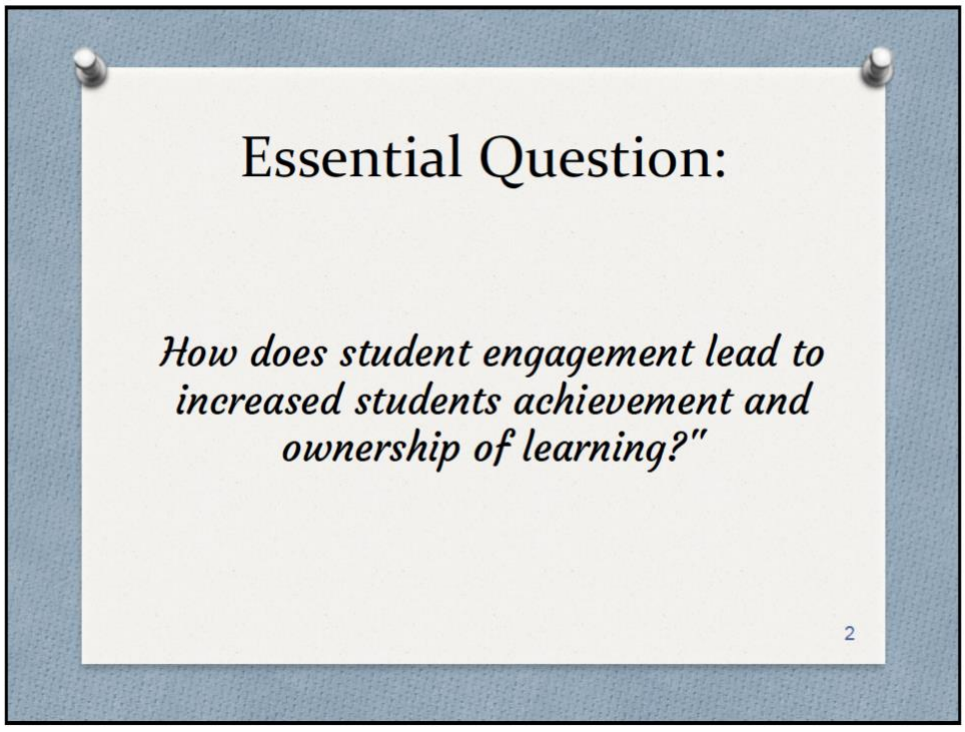
NEW TEACHER GOOGLE CLASSROOM

Remember Your Why!

Your Turn!

WHAT WILL YOU TRY?


Engaging Students
in Learning
November 4, 2019


Essential Question:
How does student engagement lead to increased students achievement and ownership of learning?"
2

Our Learning Targets

- *I can identify student engagement strategies that increase student learning.*
- *I can explain the benefits of active student engagement.*
- *I can design lessons using student engagement strategies.*

3

Speed Dating: How do I engage my students?

- *Start at the station assigned to your group and move down the list when we rotate:*

Station	Presenter
1	Stefanie Kleinholter, MWES
2	Katherine Seawright, NBHS
3	Kaylee McClure, OMES Natalie Mullins, MWES
4	John Calhoun, HMS

4

Partner Reflection

Find a partner and discuss:

- *What is something new you learned from the panel?*
- *What is one strategy you will commit to try in an upcoming lesson?*

5

OTR's

An instructional question, statement or gesture made by the teacher seeking an academic response from students

(Sprick, Knight, Reinke & McKale 2006).

6

Why OTR's?

- Increases student engagement with instruction – active engagement
- Allows for high rates of positive and specific feedback
- Limits student time for engaging in off task behavior
- Is an efficient use of instructional time
- Associated with improved reading and math performance and decrease in Office Discipline Referrals

(Heward, 1994; Cardnine, 1976; Skinner, Smith & McLean, 1994; Skinner, Bdelfior, Mace,Williams-Wilson, & Johns, 1997)

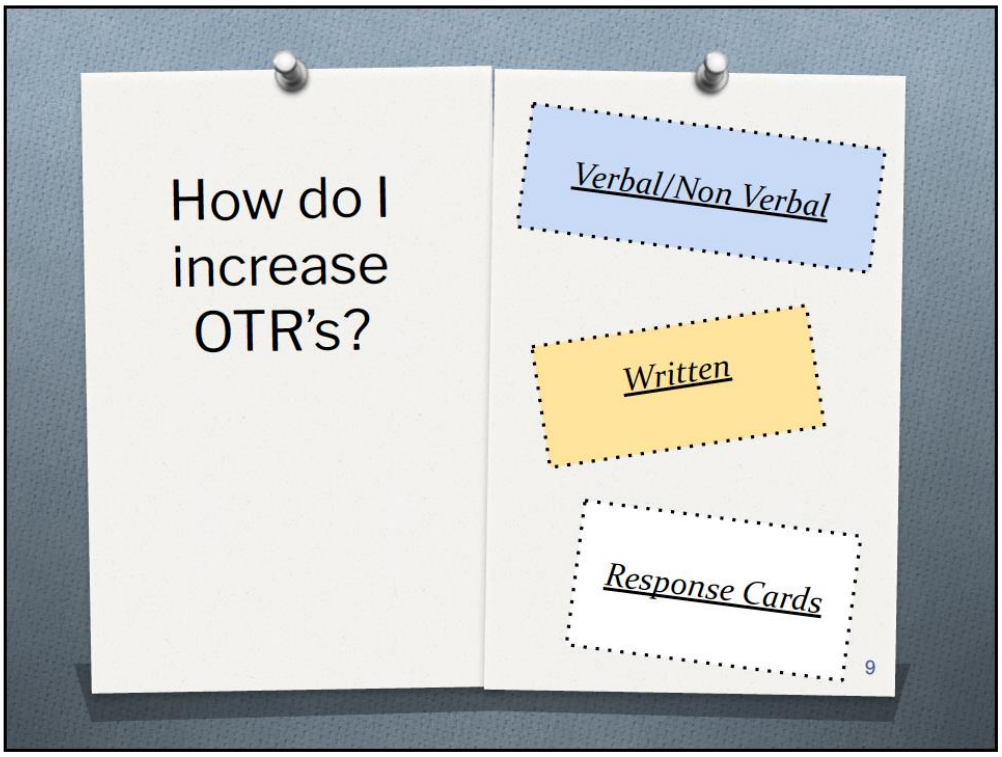
7

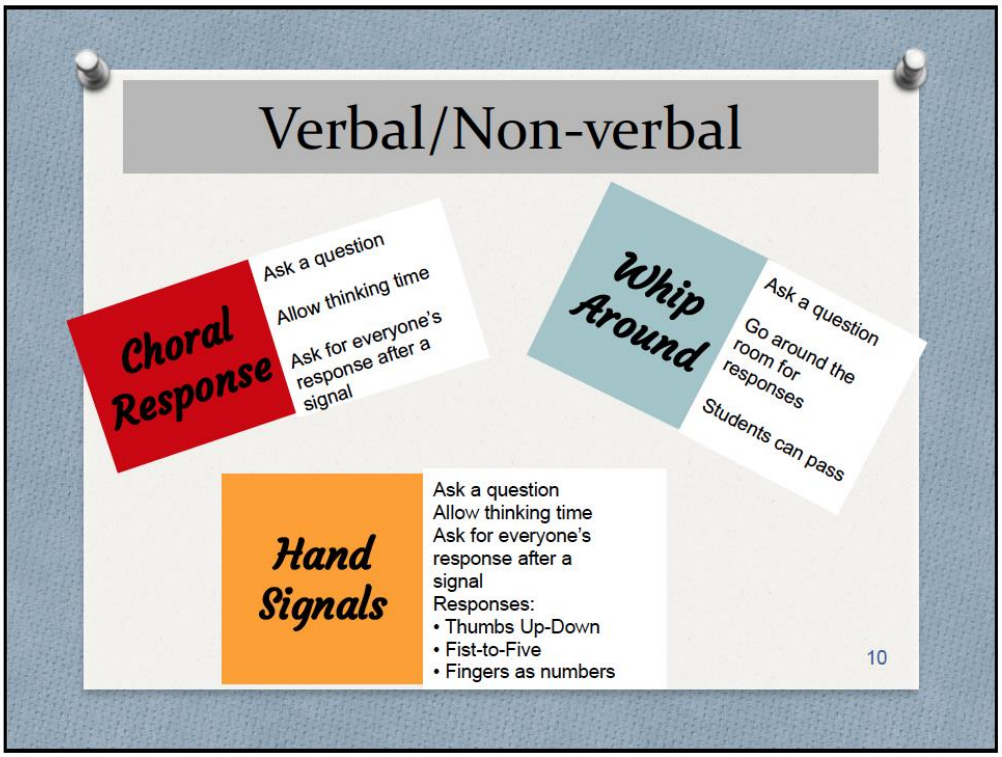
OTR Best Practices:

- Teacher Talk : no more than 40-50% of instructional time!
- Include at least 3 OTR's per minute in general education classroom

(Scott et al., 2011)

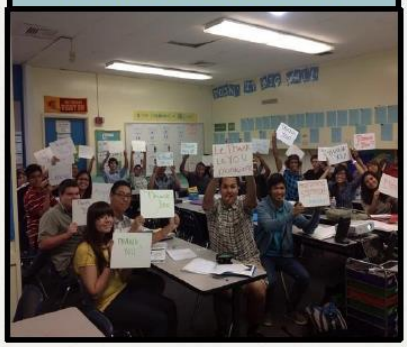
8


How do I increase OTR's?
Verbal/Non Verbal
Written
Response Cards
9

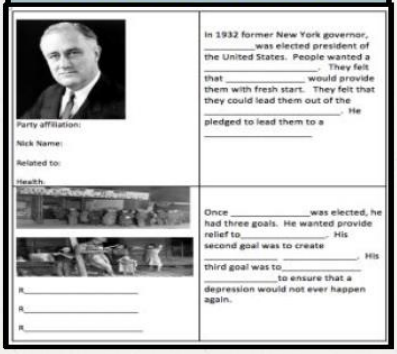

Verbal/Non-verbal
Choral Response
Ask a question
Allow thinking time
Ask for everyone's response after a signal
Whip Around
Ask a question
Go around the room for responses
Students can pass
Hand Signals
Ask a question
Allow thinking time
Ask for everyone's response after a signal
Responses:
• Thumbs Up-Down
• Fist-to-Five
• Fingers as numbers
10

OTR: Written

White Boards



Guided Notes



11

Response Cards

- *Give each student a response card*
- *Ask a question*
- *When signaled, each student/group holds up card to display their response to the question.*

1

Your Turn!

Read the following vignette. Determine how many opportunities to respond were provided totudents during the instructional period.Identify whether each opportunity was an individual or group response.

Shortly after science class started, the teacher announced, "We have a small block of ice and the same sized block of butter. Tell your neighbor which one would melt first." A few seconds later the teacher said, "Please write down in one sentence, an explanation for your answer." A few minutes later, the teacher told students to share with their neighbor what they had written. Shortly thereafter, the teacher called on one student to tell the class her answer. The teacher then asked the class to raise their hand if they agreed with this answer. Then the teacher asked students to give a thumbs down if anyone disagreed, and so on.

(Colvin,2009, p. 48)

13

Your Turn!

Read the following vignette. Determine how many opportunities to respond were provided totudents during the instructional period.Identify whether each opportunity was an individual or group response.

Shortly after science class started, the teacher announced, "We have a small block of ice and the same sized block of butter. **Tell your neighbor which one would melt first.**" A few seconds later the teacher said, "**Please write down in one sentence, an explanation for your answer.**" A few minutes later, the teacher told students to **share with their neighbor what they had written.** Shortly thereafter, the teacher **called on one student to tell the class her answer.** The teacher then **asked the class to raise their hand if they agreed with this answer**. Then the teacher **asked students to give a thumbs down if anyone disagreed**, and so on.

(Colvin,2009, p. 48)

14

Instructional Strategies that Work

February 10, 2020

Our Learning Targets

By the end of our session today, you will:

✓ examine research-based instructional strategies that affect student achievement.

✓ identify various methods for teaching these strategies.

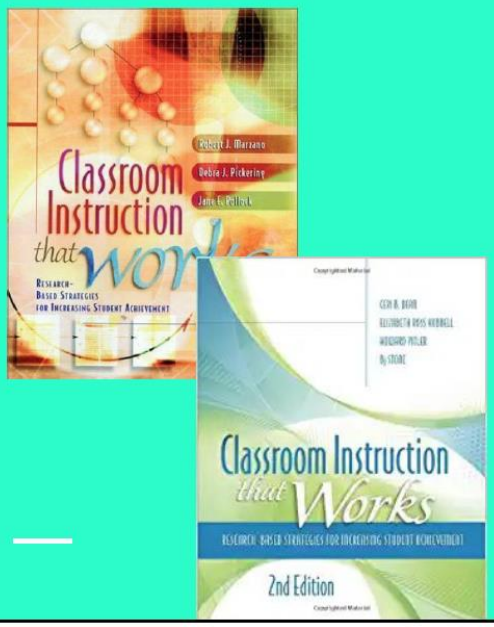
✓ determine which strategies you will incorporate in your classroom practice to increase student learning.

RESEARCH

Marzano, Pickering, Pollock,Dean, Hubbell, Pitler, Stone

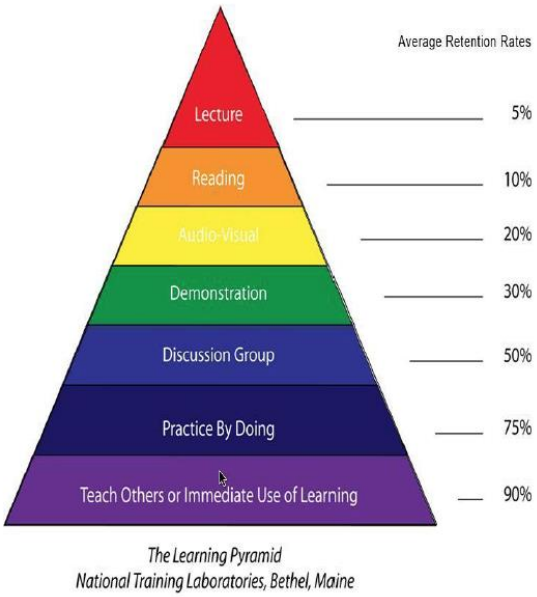
From books, Classroom Instruction That Works 1st Edition and 2nd Edition

Identified nine instructional strategies that are most likely to improve student achievement across all content areas and across all grade levels



The essential nine

- 45% Identifying Similarities and Differences
- 34% Summarizing and Note Taking
- 29% Reinforcing Effort and Providing Recognition
- 28% Homework and Practice
- 27% Nonlinguistic Representations
- 27% Cooperative Learning
- 23% Setting Objectives and Providing Feedback
- 23% Generating and Testing Hypotheses
- 22% Questions, Cues, and Advance Organizers



The Learning Pyramid
National Training Laboratories, Bethel, Maine

Your task: Learning by doing

Ready….
Use the text given to you and/or other internet resources to research your strategy. What are the key details we need to know?

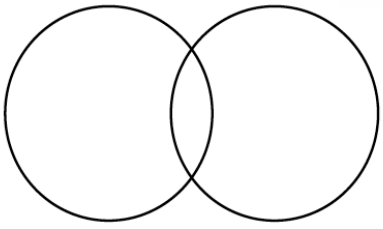
Set..
Use the Google Slide # given to you to create your presentation. You may use video clips, pictures, chart paper, etc. Be sure to include a description, examples, and a quote from the text that stood out to your group.

Teach...
Using your presentation, teach the large group about your strategy!

Identifying similarities and differences

Comparing Select items, identify characteristics, and explain how items are similar/different.	**Classifying** Identify items, the key attributes, and create a category. Repeat these steps to classify all items.
Creating Metaphors Identify important elements, generalize the information, and summarize information.	**Creating Analogies** Identify how two items are related, generalize the relationship, and identify another similar relationship.

Examples

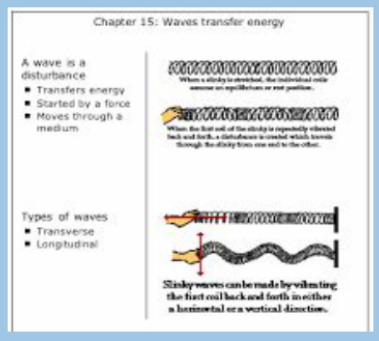


Summarizing and Note Taking

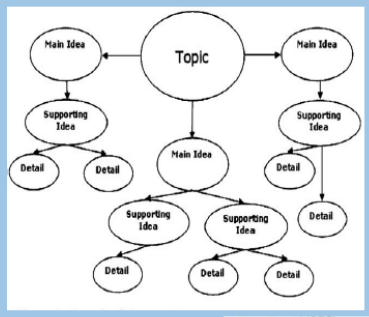
- Teach rule-based summarizing strategies
  - Take out material, take out words that repeat, replace lists with 1 word, find topic sentence.
- Use summary frames
  - Narrative, definition, top restriction-illustration, argumentation, problem-solving, conversation
- Engage in reciprocal teaching
  - Summarizing, questioning, clarifying, predicting
- Presenting Key Points
  - You can do this by using blank note rubrics
- Combination Notes
  - Students can illustrate their thoughts that connect to the notes
- Web Note Taking
  - Nonlinear note taking strategy that uses shapes, colors, and arrows

Examples

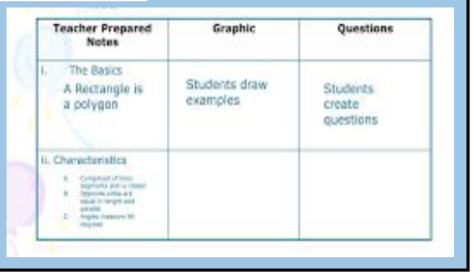
Combination Note Taking



Web Note Taking



Teacher Prepared Notes



Reinforcing Effort and Providing Recognition

Why Reinforcing Effort and Providing Recognition is Important

- Reinforcing and recognizing effort leads to increased motivation – but it often takes time to see improvement
  - 5 positives for 1 negative

Teach students about the relationship between effort and achievement

- Explicitly teach students that success comes from your effort, not luck, high ability, or help from others – YOU control it.
  - Tell stories of success to increase motivation

Students keep track of effort and giving intentional recognition

- Work with students to identify what it means to put forth effort to produce high-quality work
- Students create rules of self-accountability
  - checklists to rate effort
  - Rubric based on effort
- Provide intentional recognition
- Ensure that recognition has a positive effect on student motivation and achievement

Mastery-goal orientation → Emphasize learning & meeting goals

- Focus on intrinsic factors and deemphasizes extrinsic factors
- Achievement & mastery vs. competition
- Students begin with end in mind
  - Scaffolding used to help reach goals
  - Re-evaluation and reflection used when goals are not met
- Positive reinforcement is used sparingly and with purpose.

Use concrete symbols of recognition: Tangible rewards can have a positive effect on motivation if they are tied to accomplishment of objectives

1. Quality of work NOT completion 2. Helps to develop interest 3. Symbolic recognition does not have to last the duration of the year- Can be task oriented

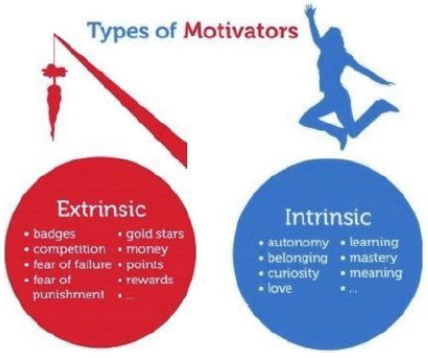
Example: 8th graders @ BLMS started using HERO as a reward system

1. on time when the bell rings 2. Prepared for class 3. Staying on task

Reinforcing effort & Providing Recognition: 5 tips:

1. Ensure curriculum recognizes the importance of effort 2. Reinforce what effort is 3. Keep praise simple & direct 4. Specify particular accomplishment 5. Vary the phrases & use non-verbal communication

Reinforcing Effort and Providing Recognition



Reinforcing Effort: Self-Assessment

- Include effort and achievement on rubrics

	EFFORT	ACHIEVEMENT
4 Excellent	I worked on the task until it was completed. I pushed myself to continue working on the task even when difficulties arose or a solution was not immediately evident. I viewed difficulties as opportunities to strengthen my understanding.	I exceeded the objectives of the task or lesson.
3 Good	I worked on the task until it was completed. I pushed myself to continue working on the task even when difficulties arose or a solution was not immediately evident.	I met the objectives of the task or lesson.
2 Needs Improvement	I put some effort into the task, but I stopped working when difficulties arose.	I met a few of the objectives of the task or lesson but did not meet others.
1 Unacceptable	I put very little effort into the task.	I did not meet the objectives of the lesson.

Homework and Practice

Pros:

- If done appropriately it's good practice
- Develop study habits and/or critical thinking skills
- Can develop a good parent/teacher relationship

Cons:

- Most don't complete their work
- Practice is rendered ineffective if they are doing it wrong the entire time
- Lack of resources or support at home
- Inappropriate or lack of parental involvement
- Practice is better when corrective feedback is present
- Physical and emotional fatigue
- Add more stress to a parent's workload

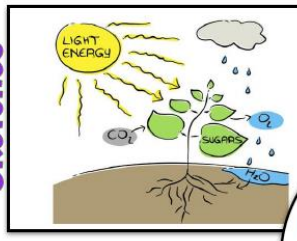
Homework and practice

Must Haves for Assigning Homework:

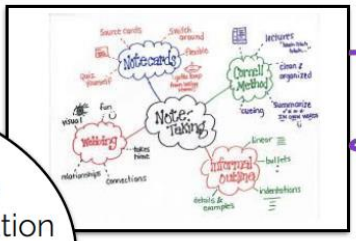
- Clearly articulating the purpose of homework
- Age appropriate amounts or time-limits for homework
- Should be a skill they are fairly familiar with
- Better to incorporate more than one skill
- Having homework policy for both parents and students
- Providing feedback

Nonlinguistic Representations

Sketches



Graphic Organizer



"When teachers use nonlinguistic representation strategies, they help students represent knowledge as imagery."

Models

Mental Picture

Kinesthetic

Cooperative Learning

- 5 elements of cooperative learning
  - Positive Interdependence
  - Face-to-face
  - Individual/Group Accountability
  - Interpersonal and Small-group skills
  - Group Processing
- Cooperative Learning: Two concepts that are keystone of preparing students for future are collaborating and creating.
- Cooperative Learning uses a variety of media like drawings audio video and presentations that demonstrate their learning. Google docs and google classroom are good ways to collaborate
- Ensure that cooperative learning aligns with the intent for learning. When the target for learning includes mastery of skills or processes, balance the use of cooperative learning with sufficient opportunities for students to practice those skills and processes independently.

Cooperative Learning

Classroom practice for cooperative learning:

- Include elements of both positive interdependence and individual accountabilit,
  - Teachers set the stage for students to be responsible for their own learning: the learning of those in their group: and the ability to demonstrate what they know: understand: and are able to do.
  - Everyone is responsible for their own learning and for contributing to the learning of all classmates.

- Keep group size small
  - Limit to no more than 5 per group
  - Everyone has their own role in the group
  - Studies show that the larger the group, external and internal motivation decreases, and members of larger groups tend to feel that their individual contributions will go unnoticed.

Cooperative Learning

- Use cooperative learning consistently and systematically
  - Use as a dominant approach in the classroom, but integrate with competition and individual work. (at least once a week)
  - Do not overuse: balance independent practice with cooperative learning in order to practice skills
  - Define norms/pick students randomly or based on criteria
  - Three types: informal: pair/share, formal: days/weeks, and base groups: long term

Setting Objectives and Providing Feedback

Recommendations for setting classroom objectives

- Set learning objectives that are specific but not restrictive
- Communicate the learning objectives to students and parents
- Connect the learning objectives to previous and future learning
- Engage students in setting personal learning objectives

Too General	Too Specific	Appropriately Specific
Understand the fundamental concepts of growth and development.	Describe the function of the respiratory system in three sentences.	Identify basic human body systems and their functions.

"Being in a classroom without knowing the direction for learning is similar to taking a purposeless trip to an unfamiliar city."

Setting Objectives and Providing Feedback

- Provide feedback in time to meet students' needs.
- Be specific when giving feedback, what they did well, and areas of growth.
- Provide a rubric with specific feedback.
- After, have students fill out the graphic organizer.

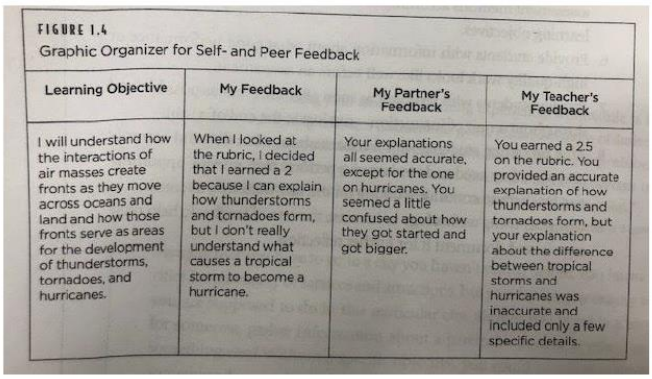


FIGURE 1.4
Graphic Organizer for Self- and Peer Feedback

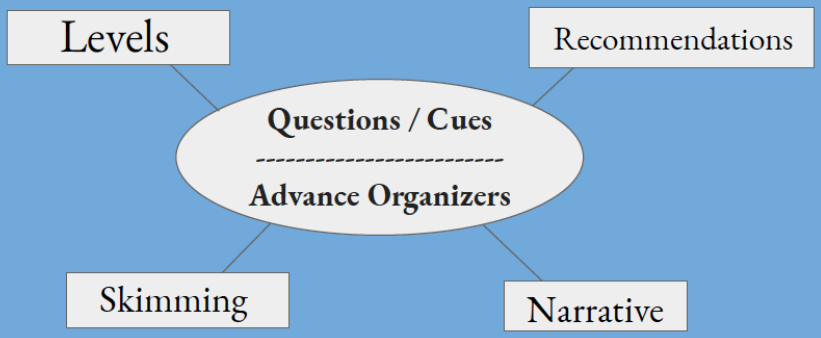
Learning Objective	My Feedback	My Partner's Feedback	My Teacher's Feedback
I will understand how the interactions of air masses create fronts as they move across oceans and land and how those fronts serve as areas for the development of thunderstorms, tornadoes, and hurricanes.	When I looked at the rubric, I decided that I earned a 2 because I can explain how thunderstorms and tornadoes form, but I don't really understand what causes a tropical storm to become a hurricane.	Your explanations all seemed accurate, except for the one on hurricanes. You seemed a little confused about how they got started and got bigger.	You earned a 2.5 on the rubric. You provided an accurate explanation of how thunderstorms and tornadoes form, but your explanation about the difference between tropical storms and hurricanes was inaccurate and included only a few specific details.

Generating and Testing Hypothesis

- Used in all content areas
- Asking questions and seeking answers can occur in all content areas
- Uses two thinking processes that can be used alone or together
  - Deductive reasoning
  - Making inferences
- Deepens students' knowledge because it requires the use of critical thinking skills such as analysis and evaluation
- More effective than lectures
- Different ways to use accomplish this: MODEL FOR BETTER UNDERSTANDING
  - Audio recording
  - Graphic organizers
  - Rubrics
  - Events for parents or community members can ask
  - Sentence frames
- Look through infor quickly that is interesting to us
- "Asking students to generate and test hypotheses moves them past "right-answer learning"

Level 1 - Naming Objects
Level 2 - Organization / Classification
Level 3 - Higher-order reasoning
Level 4 - Abstract Thought

- Focus on what is important
- Use explicit cues
- Ask Inferential Questions
- Ask Analytical Questions



Skimming a text before reading it introduces the reader to new material.

Expository organizers uses story format to introduce new material.

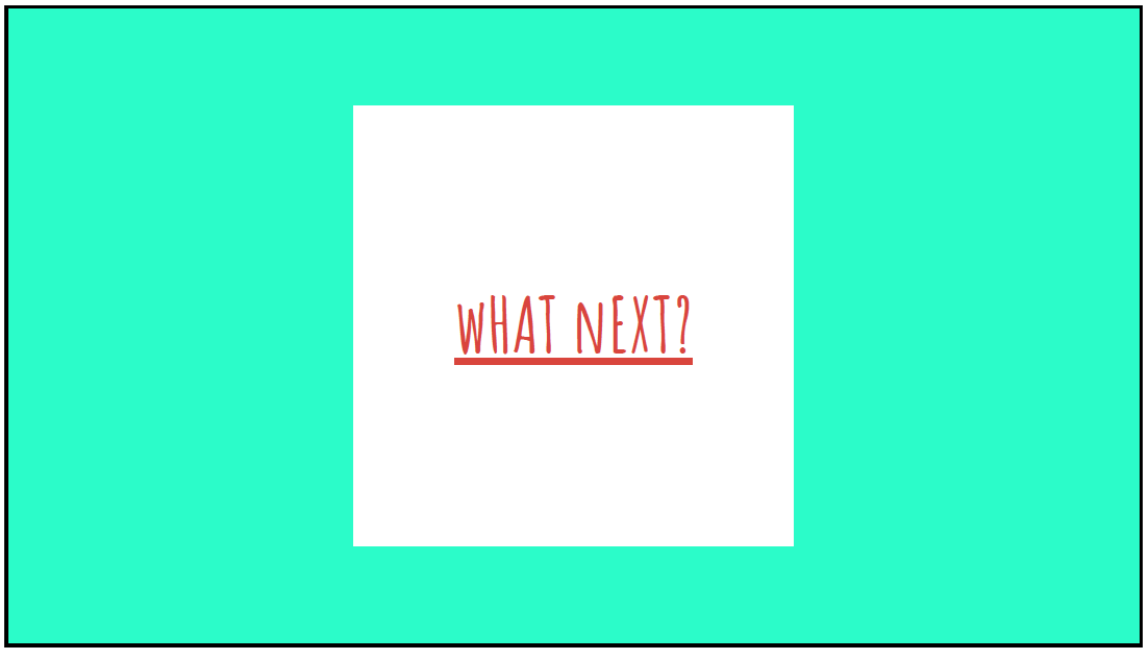
WORKTIME

How Does This look in the Classroom?

Can/Did you.....

- ✓ examine research-based instructional strategies that affect student achievement?
- ✓ identify various methods for teaching these strategies?
- ✓ determine which strategies you will incorporate in your classroom practice to increase student learning?

Exit Slip


WHAT NEXT?

APPENDIX G

IRB Approval Letter

XP Initial Review

Approval Ends:	IRB Number:
9/9/2020	52159

TO:	William Bacon, M.S. Ed Educational Leadership Studies PI phone #: 6067483844 PI email: jesse.bacon@uky.edu
FROM:	Chairperson/Vice Chairperson Non Medical Institutional Review Board (IRB)
SUBJECT:	Approval of Protocol
DATE:	9/11/2019

On 9/10/2019, the Non Medical Institutional Review Board approved your protocol entitled:

New Teacher Induction: Improving Teacher Self-Efficacy

Approval is effective from 9/10/2019 until 9/9/2020 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, the IRB approved consent/assent document(s) to be used when enrolling subjects can be found in the "All Attachments" menu item of your E-IRB application. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review (CR)/Administrative Annual Review (AAR) request which must be completed and submitted to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigator's responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" available in the online Office of Research Integrity's IRB Survival Handbook. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at 859-257-9428.

APPENDIX H

Administrators' Consent to Participate in a Research Study

IRB Approval
9/10/2019
IRB # 52159

Administrators' Consent to Participate in a Research Study

KEY INFORMATION FOR NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY:

You are being invited to take part in a research study about how a new teacher induction program influences teachers' self-efficacy in the areas of Instructional Strategies, Student Engagement and Classroom Management. You are being invited to take part in this research study because no formal induction program exists in BCPS, and it is important to understand how practices and structures of such a program may influence teacher efficacy and their intention to remain in the school district. The approximate number of participants enrolled in this study is 30.

The information on this page provides key information to help you decide whether to participate. I have included detailed information after this page. Feel free to ask questions now, and if you have questions later, the contact information for the research investigator in charge of the study is below.

WHAT IS THE STUDY ABOUT AND HOW LONG WILL IT LAST?

By doing this study, I am trying to learn how a formal induction program impacts new teachers' self-efficacy in implementing high yield instructional strategies, incorporating student engagement techniques, and designing high-yield instructional techniques. Your participation in this research will last about seven months.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS STUDY?

There is no guarantee that you will get any benefit from taking part in this study. However, information learned may benefit professional learning within the school

WHAT ARE KEY REASONS YOU MIGHT CHOOSE NOT TO VOLUNTEER FOR THIS STUDY?

Participating in this study will require a minimum time commitment of three hours over the next seven months. To the best of my knowledge, the things you will be doing in this study will cause you no harm or pose any risk that is greater than what you would experience in everyday life.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any services, benefits, or rights you would normally have if you choose not to volunteer.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS OR CONCERNS?

The person in charge of this study is Jesse Bacon, who is a doctoral candidate at the University of Kentucky. If you have questions, suggestions, or concerns regarding this study or you want to withdraw from the study his contact information is: 606-748-3844 or jesse.bacon@uky.edu. The faculty advisor for the study is Dr. John Nash, who can be contact at 859-257-7845 or john.nash@uky.edu.

If you have any concerns or questions about your rights as a volunteer in this research, contact staff in the University of Kentucky (UK) Office of Research Integrity (ORI) between the business hours of 8am and 5pm EST, Monday-Friday at 859-257-9428 or toll free at 1-866-400-9428.

Page **1** of **4**

52159

DETAILED CONSENT:

ARE THERE REASONS WHY YOU WOULD NOT QUALIFY FOR THIS STUDY?

If you have a teacher in your building who will be participating in the new teacher induction program, you are eligible to participate in the study. However, if you are unable to participate in meetings to plan future professional learning activities, or if you are planning an extended professional leave over the course of this study for any reason, you would not qualify.

WHERE WILL THE STUDY TAKE PLACE AND WHAT IS THE TOTAL AMOUNT OF TIME INVOLVED?

The research procedures will be conducted within the Bullitt County Public School District. You will need to attend 3 meetings during the study. These meetings will include a group interview to learn about district-wide goals for new teacher induction and professional learning opportunities available for teachers, reporting of suggested professional development for teachers, and recommendations for future professional learning opportunities. The total amount of time you will be asked to volunteer for this study is 3 hours over the next seven months.

WHAT WILL YOU BE ASKED TO DO?

In this research study, you will be asked to participate in a group interview to discuss district-wide goals for new teacher induction and continued professional learning for new teachers. A data collector who is not affiliated with Bullitt County Public Schools will be used to recruit participants and collect data. The data provided will be used to develop a specific model of induction for new teachers in your school. You will be asked to participate in a follow-up planning meeting to learn about the induction model and the planned professional learning experiences for participating teachers. At the end of the study period, you will be asked to participate in a meeting to learn about the effectiveness of the induction program for influencing teachers' self-efficacy in implementing high yield instructional strategies, effective student engagement techniques, and efficient classroom management systems. Information learned about the effectiveness of instructional coaching will be used to plan future professional learning opportunities for teachers.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. However, potential risks may include a breach of confidentiality. Please see the section titled "Who Will See Information That You Give?" for further details related to this risk.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

There is no guarantee that you will benefit from participating in this study. However, information learned may benefit the professional learning new teachers engage in at your school.

IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study. Please be advised that even if you choose not to participate in the study, the new teachers employed in your building will still be required to participate in the New Teacher Induction Program as a condition of their employment as a new teacher in the Bullitt County Public School District.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in this study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

When we write about or share the results from the study, we will write about the combined information. We will keep your name and other identifying information private. Pseudonyms are provided for participants and the schools. When meeting in group settings, participants will be reminded that information is confidential and should not be shared outside of the group setting.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Data collected in this study that supports the effectiveness of the new teacher induction program will be shared with the district student learning team to develop future professional learning activities, however data are reported collectively rather than individually. Data collected in this study are saved in a password protected location on the data collector's personal computer.

You should know that there are some circumstances in which we may have to show your information to other people. For example, the law may require us to share your information with:

- authorities, if you have a reportable disease; if you report information about a child being abused, if you pose a danger to yourself or someone else; and/or
- To ensure the study is conducted properly, officials at the University of Kentucky may look at or copy pertinent portions of records that identify you.

We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained via the Internet. Third-party applications used in this study may have Terms of Service and Privacy policies outside of the control of the University of Kentucky.

CAN YOU CHOOSE TO WITHDRAW FROM THE STUDY EARLY?

You can choose to leave the study at any time. You will not be treated differently if you decide to stop taking part in the study.

If you choose to leave the study early, data collected until that point will remain in the study database and may not be removed.

The investigators conducting the study may need to remove you from the study. This may occur for a number of reasons. You may be removed from the study if:

- you are not able to follow the directions, or
- you are not able to participate in scheduled meetings, or
- they find that your participation in the study is more risk than benefit to you.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

You will not receive any rewards or payment for taking part in the study.

WHAT ELSE DO YOU NEED TO KNOW?

The Principal Investigator in this study, Jesse Bacon, is a student. He is being guided in this research by John Nash, EdD. The data collector for the study will be Edwin Oyler. There may be other people on the research team assisting at different times during the study.

WILL YOUR INFORMATION BE USED FOR FUTURE RESEARCH?

Your information collected for this study will NOT be used or shared for future research studies.

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ADMINISTRATOR INFORMED CONSENT SIGNATURES

This consent includes the following:

- **Key Information Page**
- **Detailed Consent**

You are the subject or are authorized to act on behalf of the subject. You will receive a copy of this consent form after it has been signed.

_____	_____
Signature of research subject	**Date**
_____	
Printed name of research subject	

_____	_____
Signature of researcher	**Date**
_____	
Printed name of researcher	

APPENDIX I

Teacher Informed Consent to Participate in the Study

IRB Approval
9/10/2019
IRB # 52159

Teachers' Consent to Participate in a Research Study

KEY INFORMATION FOR NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY:

You are being invited to take part in a research study about how a new teacher induction program influences teachers' self-efficacy in the areas of Instructional Strategies, Student Engagement and Classroom Management. You are being invited to take part in this research study because no formal induction program exists in BCPS, and it is important to understand how practices and structures of such a program may influence teacher efficacy and their intention to remain in the school district. The approximate number of participants enrolled in this study is 30.

The information on this page provides key information to help you decide whether to participate. I have included detailed information after this page. Feel free to ask questions now, and if you have questions later, the contact information for the research investigator in charge of the study is below.

WHAT IS THE STUDY ABOUT AND HOW LONG WILL IT LAST?

By doing this study, I am trying to learn how a formal induction program impacts new teachers' self-efficacy in implementing high yield instructional strategies, incorporating student engagement techniques, and designing high-yield instructional techniques. Your participation in this research will last about seven months.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS STUDY?

There is no guarantee that you will get any benefit from taking part in this study. However, information learned may benefit professional learning within the school district.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE NOT TO VOLUNTEER FOR THIS STUDY?

Participating in this study will require an extra 5 minutes at the conclusion of each induction session (for a total of 20 minutes) and an additional 2 hours at the conclusion of the study. Additional time may be required; however, this may be time you would be spending developing instructional lessons regardless of your participation in this study. To the best of my knowledge, the things you will be doing in this study will cause you no harm or pose any risk that is greater than what you would experience in everyday life.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any services, benefits, or rights you would normally have if you choose not to volunteer.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS OR CONCERNS?

The person in charge of this study is Jesse Bacon, who is a doctoral candidate at the University of Kentucky. If you have questions, suggestions, or concerns regarding this study or you want to withdraw from the study his contact information is: 606-748-3844 or jesse.bacon@uky.edu. The faculty advisor for the study is Dr. John Nash, who can be contact at 859-257-7845 or john.nash@uky.edu.

If you have any concerns or questions about your rights as a volunteer in this research, contact staff in the University of Kentucky (UK) Office of Research Integrity (ORI) between the business hours of 8am and 5pm EST, Monday-Friday at 859-257-9428 or toll free at 1-866-400-9428.

Page **1** of **4**

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DETAILED CONSENT:

ARE THERE REASONS WHY YOU WOULD NOT QUALIFY FOR THIS STUDY?

As a new teacher in the Bullitt County Public School District, you will be required per your contract to participate in the New Teacher Induction sessions that are scheduled outside of school hours. Participation in the program qualifies you for participation in the study. However, if you are planning an extended professional leave over the course of this study that would cause you not to participate in one or more of the induction sessions for any reason, you would not qualify.

WHERE WILL THE STUDY TAKE PLACE AND WHAT IS THE TOTAL AMOUNT OF TIME INVOLVED?

The research procedures will be conducted within the Bullitt County Public School District. As a part of the required induction program, you will attend 4 meetings during the study timeframe. These meetings will include professional development, instructional unit development, classroom observations, and instructional coaching. The total amount of time you can expect to volunteer for activates that are specific to the study is two hours and 20 minutes over the next seven months. The amount of time it will take to complete the initial survey for the study is approximately 15 minutes.

WHAT WILL YOU BE ASKED TO DO?

As a new employee in the Bullitt County Public School district, you are required to participate in the new teacher induction program where you will receive support and assistance from a program coordinator in the areas of implementing high yield instructional strategies, effective student engagement techniques, and efficient classroom management systems. As a part of the required program, you will be asked to allow access to your classroom for participation in classroom observations and participate in instructional coaching. The professional development sessions, classroom observations, and instructional coaching sessions will take place throughout the school year.

As a part of the research study, you will be asked to complete a pre-assessment survey to measure your self-efficacy in the areas of implementing high yield instructional strategies, effective student engagement techniques, and efficient classroom management systems prior to the start of the induction program. Additionally, you will be asked to complete an evaluation at the conclusion of each induction session. At the end of the study period, you will be asked to take a post-assessment survey and participate in a group interview that may take place outside of school hours. The group interview will be audio recorded by the researcher. A data collector who is not affiliated with Bullitt County Public Schools will be used to recruit participants and collect data. The time required to complete these activities are included in the total time commitment.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. However, you should know that analyzed data for the effectiveness of the new teacher induction model will be collectively reported to the district student learning team for the purpose of program improvement. Please see the section titled “Who Will See Information That You Give?” for further details.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

There is no guarantee that you will benefit from participating in this study. If you take part in this study, information learned may help others at your school or throughout the district.

IF YOU DON’T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study. Please be advised that even if you choose not to participate in the study, you will still be required to participate in the New Teacher Induction Program as a condition of your employment as a new teacher in the Bullitt County Public School District.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in this study.

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WHO WILL SEE THE INFORMATION THAT YOU GIVE?

When we write about or share the results from the study, we will write about the combined information. We will keep your name and other identifying information private. Pseudonyms are provided for participants and the schools. When meeting in group settings, participants will be reminded that information is confidential and should not be shared outside of the group setting.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Data collected in this study that supports the effectiveness of the new teacher induction program will be shared with the district student learning team to develop future professional learning activities, however data are reported collectively rather than individually. I am the only researcher engaged in this study. Data collected in this study are saved in a password protected location on the data collector's personal computer.

You should know that there are some circumstances in which we may have to show your information to other people. For example, the law may require us to share your information with:

- authorities, if you have a reportable disease; if you report information about a child being abused, if you pose a danger to yourself or someone else; and/or
- To ensure the study is conducted properly, officials at the University of Kentucky may look at or copy pertinent portions of records that identify you.

We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained via the Internet. Third-party applications used in this study may have Terms of Service and Privacy policies outside of the control of the University of Kentucky.

CAN YOU CHOOSE TO WITHDRAW FROM THE STUDY EARLY?

You can choose to leave the study at any time. You will not be treated differently if you decide to stop taking part in the study.

If you choose to leave the study early, data collected until that point will remain in the study database and may not be removed.

The investigators conducting the study may need to remove you from the study. This may occur for a number of reasons. You may be removed from the study if:

- you are not able to follow the directions, or
- they find that your participation in the study is more risk than benefit to you.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

You will not receive any rewards or payment for taking part in the study.

WHAT ELSE DO YOU NEED TO KNOW?

The Principal Investigator in this study, Jesse Bacon, is a student. He is being guided in this research by John Nash, EdD. The data collector for the study will be Edwin Oyler.

WILL YOUR INFORMATION BE USED FOR FUTURE RESEARCH?

Your information collected for this study will NOT be used or shared for future research studies.

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TEACHER INFORMED CONSENT SIGNATURES

This consent includes the following:

- **Key Information Page**
- **Detailed Consent**

You are the subject or are authorized to act on behalf of the subject. You will receive a copy of this consent form after it has been signed.

_____	_____
Signature of research subject	**Date**
_____	
Printed name of research subject	

_____	_____
Signature of researcher	**Date**
_____	
Printed name of researcher	

APPENDIX J

Informed Consent to Participate in the Focus Group

IRB Approval
9/10/2019
IRB # 52159

Teachers' Consent to Participate in a Research Study Focus Group

KEY INFORMATION FOR NEW TEACHER INDUCTION: IMPROVING TEACHER SELF-EFFICACY:

You are being invited to take part in a research study focus group about how your experience as a participant in the new teacher induction program influenced your self-efficacy in the areas of Instructional Strategies, Student Engagement and Classroom Management. You are being invited to take part in this focus group because you agreed to take part in the research study, and it is important to understand how practices and structures of our program may have influence your efficacy and your intention to remain in the school district. The approximate number of participants enrolled in this study is 30.

The information on this page provides key information to help you decide whether to participate. I have included detailed information after this page. Feel free to ask questions now, and if you have questions later, the contact information for the research investigator in charge of the study is below.

WHAT IS THE FOCUS GROUP ABOUT AND HOW LONG WILL IT LAST?

By doing this focus group, I am trying to learn how a formal induction program impacts new teachers' self-efficacy in implementing high yield instructional strategies, incorporating student engagement techniques, and designing high-yield instructional techniques. Your participation in this focus group will last about two hours.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE TO VOLUNTEER FOR THIS FOCUS GROUP?

There is no guarantee that you will get any benefit from taking part in this focus group. However, information learned may benefit professional learning within the school district.

WHAT ARE KEY REASONS YOU MIGHT CHOOSE NOT TO VOLUNTEER FOR THIS FOCUS GROUP?

Participating in this focus group will require an extra two hours. To the best of my knowledge, the things you will be doing in this focus group will cause you no harm or pose any risk that is greater than what you would experience in everyday life.

DO YOU HAVE TO TAKE PART IN THE FOCUS GROUP?

If you decide to take part in the focus group, it should be because you really want to volunteer. You will not lose any services, benefits, or rights you would normally have if you choose not to volunteer.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS OR CONCERNS?

The person in charge of this study is Jesse Bacon, who is a doctoral candidate at the University of Kentucky. If you have questions, suggestions, or concerns regarding this study or you want to withdraw from the study his contact information is: 606-748-3844 or jesse.bacon@uky.edu. The faculty advisor for the study is Dr. John Nash, who can be contact at 859-257-7845 or john.nash@uky.edu.

If you have any concerns or questions about your rights as a volunteer in this research, contact staff in the University of Kentucky (UK) Office of Research Integrity (ORI) between the business hours of 8am and 5pm EST, Monday-Friday at 859-257-9428 or toll free at 1-866-400-9428.

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DETAILED CONSENT:

ARE THERE REASONS WHY YOU WOULD NOT QUALIFY FOR THIS FOCUS GROUP?

As a new teacher in the Bullitt County Public School District, participation in the New Teacher Induction program research study qualifies you for participation in the focus group. However, if you chose not to participate in the study for whatever reason, you would not qualify.

WHERE WILL THE FOCUS GROUP TAKE PLACE AND WHAT IS THE TOTAL AMOUNT OF TIME INVOLVED?

The focus group will be conducted within the Bullitt County Public School District. The amount of time it will take to participate in the focus group study is approximately two hours.

WHAT WILL YOU BE ASKED TO DO?

You participate in a group interview that may take place outside of school hours. The group interview will be audio recorded by the data collector.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. However, you should know that analyzed data for the effectiveness of the new teacher induction model will be collectively reported to the district student learning team for the purpose of program improvement. Please see the section titled "Who Will See Information That You Give?" for further details.

WILL YOU BENEFIT FROM TAKING PART IN THIS FOCUS GROUP?

There is no guarantee that you will benefit from participating in this focus group. If you take part in this focus group, information learned may help others at your school or throughout the district.

IF YOU DON'T WANT TO TAKE PART IN THE FOCUS GROUP, ARE THERE OTHER CHOICES?

If you do not want to be in the focus group, there are no other choices except not to take part in the focus group.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in this study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

When we write about or share the results from the focus group, we will write about the combined information. We will keep your name and other identifying information private. Pseudonyms are provided for participants and the schools. When meeting in group settings, participants will be reminded that information is confidential and should not be shared outside of the group setting. However, because of the nature of the group interview, confidentiality cannot be guaranteed.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Data collected in this focus group that supports the effectiveness of the new teacher induction program will be shared with the district student learning team to develop future professional learning activities, however data are reported collectively rather than individually. Data collected in this focus group are saved in a password protected location on the data collector's personal computer.

You should know that there are some circumstances in which we may have to show your information to other people. For example, the law may require us to share your information with:

- authorities, if you have a reportable disease; if you report information about a child being abused, if you pose a danger to yourself or someone else; and/or
- To ensure the study is conducted properly, officials at the University of Kentucky may look at or copy pertinent portions of records that identify you.

CAN YOU CHOOSE TO WITHDRAW FROM THE FOCUS GROUP EARLY?

You can choose to leave the focus group at any time. You will not be treated differently if you decide to stop taking part in the focus group.

If you choose to leave the focus group early, data collected until that point will remain in the study database and may not be removed.

The investigators conducting the study may need to remove you from the focus group. This may occur for a number of reasons. You may be removed from the focus group if:

- you are not able to follow the directions, or
- they find that your participation in the focus group is more risk than benefit to you.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS FOCUS GROUP?

You will not receive any rewards or payment for taking part in the study.

WHAT ELSE DO YOU NEED TO KNOW?

The Principal Investigator in this study, Jesse Bacon, is a student at the University of Kentucky. He is being guided in this research by John Nash, EdD. The data collector for the study will be Edwin Oyler.

WILL YOUR INFORMATION BE USED FOR FUTURE RESEARCH?

Your information collected for this study will NOT be used or shared for future research studies.

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TEACHER INFORMED CONSENT SIGNATURES

This consent includes the following:

- **Key Information Page**
- **Detailed Consent**

You are the subject or are authorized to act on behalf of the subject. You will receive a copy of this consent form after it has been signed.

_____	_____
Signature of research subject	**Date**
_____	
Printed name of research subject	

_____	_____
Signature of researcher	**Date**
_____	
Printed name of researcher	

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VITA

William Jesse Bacon

Education:

Morehead State University Master of Arts in School Administration	2007
Morehead State University Bachelor of Arts in Secondary Social Studies Education	2004

Professional Experience:

Superintendent of Schools Bullitt County Public Schools	July 2018-present
Principal Simons Middle School	2014–2018
Associate Principal Montgomery County High School	2013-2014
Interim Principal Fleming County High School	Feb 2012-July 2012
Assistant Principal Fleming County High School	2010-2013
Director of Safe Schools/Personnel/Federal Programs Fleming County Schools	2008-2010
Classroom Teacher Fleming County High School	2005-2008
Classroom Teacher Oldham County High School	2004-2005