ABSTRACT

Title of Dissertation: HIGH QUALITY INDUCTION TO ENSURE

HIGH QUALITY TEACHING

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In his letter introducing the 2011 reauthorization of the Elementary and Secondary Education Act, former President Barack Obama stated "we know that from the moment students enter a school, the most important factor in their success is not the color of their skin or the income of their parents – it is the teacher standing at the front of the classroom." (U.S. Department of Education, 2011, p. 1). The findings of several research studies point to teachers' classroom practice as one of the most impactful factors, if not the most impactful factor, on the success of students (Akirba, LeTendre, & Scribner, 2007; Putman, 2012; Kini & Podolysky, 2016). However, with high teacher attrition rates nationwide and decreased enrollment in and completion of teacher preparation programs, researchers are projecting a difference of 200,000 candidates by the 2024-25 school year between the supply of teachers and the demand for new teachers by the 13,500 school districts across the United States (Sutcher, Darling-Hammond, and Carver-Thomas, 2016). Given the ways that the COVID-19 pandemic has exacerbated this problem, we are at a critical time to consider ways to recruit, prepare and retain teachers for our nation's schools.

In 2021, Rosenberg and Anderson, writers at Education Resource Strategies (ERS), described the challenge of attracting and retaining teachers as a trifecta of "low salaries, difficult working conditions, and a lack of career pathway opportunities." Then came the COVID-19 pandemic and, according to the ERS analysts, "being a teacher became even more challenging than before" (Rosenberg & Anderson, 2021, pg. 3). The COVID-19 pandemic elevated the need to consider effective ways to inculcate novice teachers into the profession, give them essential skills, and prepare them for the rigorous, demanding, and rewarding profession that they have chosen. One way to do this is to provide and quickly engage new and beginning teachers in a high-quality induction program that equips them with the necessary skills to be successful and builds their professional capital.

The purpose of this qualitative study was to investigate the gaps within the district's current comprehensive teacher induction program in comparison to the induction program components within the state's regulations and Wong's Induction Framework. Due to the fact that the largest percentage of the new/beginning teacher population leave the district after their second year, it is important that the teacher induction program provides them with the skills that are necessary to be, and feel, successful. The research questions that guided this study were:

- 1. What components of high-quality induction programs are new and beginning teachers experiencing in the district's current comprehensive teacher induction program?
- 2. What are the ways in which new and beginning teachers' induction experiences reflect the state's regulations and Wong's high-quality Induction Framework?

3. Where do gaps exist between the current induction practices for new and beginning teachers in the district and the state's regulations and Wong's components of high-quality induction programs?

The study was executed in three phases, (a) administering a new/beginning teacher survey, (b) conducting individual teacher interviews and school and curricular office leader focus groups, and (c) undertaking a document analysis of district documents. Analyses of new/beginning teacher and school and curricular office leader surveys, interviews, and focus groups assisted in identifying induction program components experienced by new/beginning teachers and offered by system leaders. Findings from all aspects of this study helped identify missing components of the district's current induction program. These findings indicate the need to build administrator capacity around teacher induction and the establishment of systemic school-based induction programs. Establishing communication structures between system-level and school-based leaders is needed to ensure that new and beginning teachers are being provided a variety of supports that meet their needs.

HIGH QUALITY INDUCTION TO ENSURE HIGH QUALITY TEACHING

by

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Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Education 2022

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Dedication

This dissertation is dedicated first, to the teachers within my district. Education is a challenging, but rewarding profession. With the pandemic it has proven to be even more challenging. When I needed to engage in my research, however, so many of you offered your valuable time and gave me more information than I ever expected to obtain. Your students are lucky to have you, your passion, and your expertise. I can not thank you enough for what you have done for me and what you do for your students everyday. School and curricular office leaders, I am in awe of you. Thank you for your time and dedication to our teachers and students. And most importantly, I dedicate this dissertation to our students, past, present, and future. With every decision I make, I hope to improve the quality of your educational experience.

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Section I: Introduction

Problem Statement

The COVID-19 pandemic has changed the way in which we live in this world, how we interact with one another, and how we educate our children. The impact of the quick but necessary shifts in our education system, although not yet fully realized, continue to mandate that school systems modify practices, policies, and structures as they work to return to high-quality, in-school instruction. Even before the COVID-19 pandemic, Rosenberg and Anderson (2021), writers at Education Resource Strategies (ERS), reported that "education leaders were increasingly concerned about the shortage of qualified, skilled educators, especially in our lowest-income communities and hardest-to-staff roles" (p. 3). According to Rosenberg and Anderson, in March 2019, the Economic Policy Institute reported that "the teacher shortage is real, large and growing, and worse than we thought" (p. 3). Later that same year, the Center for American Progress (2019, as cited in Rosenberg & Anderson, 2021) summarized the challenge of attracting and retaining teachers as a trifecta of "low salaries, difficult working conditions, and a lack of career pathway opportunities" (p. 3). With the disruption of the pandemic, "being a teacher became even more challenging than before, and as noted in a report from the Learning Policy Institute, there are growing worries among district leaders about future [teacher] shortages given the long-term impacts of the pandemic" (Rosenberg & Anderson, 2021, p. 3).

DiNapoli (2021) compiled survey results from the National Board for Professional Teaching Standards, the National Association of Secondary School Principals (NASSP), and the National Education Association (NEA), and concluded that, as a result of the pandemic, many educators are planning to retire early, take a leave of absence, or exit the profession entirely. In an August 2020 poll of principals across the nation, 45% of

the respondents indicated that pandemic working conditions were "accelerating their plans to leave the profession" (DiNapoli, 2021, p.6). In this same August 2020 NEA poll given to principals, 28% of all teachers and 43% of African American teachers agreed that they were more likely to retire early or leave the profession due to pandemic working conditions (DiNapoli, 2021). In addition to the potential increase in teacher retirement due to the pandemic, on average undergraduate education preparation program enrollment is decreasing. The U.S. Department of Education's Title II 2019 report shows a decrease in teacher preparation program enrollment by almost 4% in colleges and universities, 5.5% at historically Black colleges and universities (HBCUs), approximately 10% at community colleges, and more than 20% at two-year HBCUs. Adding to this was the fact that many states already experienced a shortage of qualified candidates in math, science, and special education.

Due to the immediate need to move to virtual instruction during the pandemic, within weeks, classroom teachers had to acquire the technological skills to create content for online spaces, learn new delivery tools, understand and attempt to use synchronous and asynchronous pedagogical strategies, engage more directly with parents, and address student mental health within a virtual environment (Hartshorne et al., 2020). School and system leaders attempted to build skills in these areas by providing teachers with professional development opportunities that would enable them to provide an equivalent educational experience to what students had received when face-to-face inside classrooms. Professional development, as described by the American Federation of Teachers, is "the centerpiece of efforts to enhance the profession and improve members' practice" (2020, p. 1). In his research, Guskey defines professional development as "systemic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning

outcomes of students" (2002, pg. 381). Among educators, both professional development and professional learning programs are highly regarded as an essential tool for their professional growth (Gusky, 2002; American Federation of Teachers, 2020).

In the fall of 2021 when school systems attempted to return to full-time, in-school instruction, teachers were again confronted with numerous challenges. Transitioning back to the classroom required teachers to possess yet another skill set to accommodate for student trauma, loss of learning, in-class safety, and social distancing. The demands of returning to full-time, in-person instruction compounded with the increase in teacher attrition will result in a large number of new teachers coming into the profession in the next few years. Therefore, it is critical that school systems ensure that they have, and provide, an intensive professional learning induction program that helps new and beginning teachers obtain the knowledge and skills necessary to grow their professional practice and be successful in this profession.

The Importance of Teacher Induction

Even with year-long internship programs included in pre-service preparation, mandating that local education agencies (LEAs) provide assistance to teachers as they begin their careers in education has become a widespread policy directive. State education agencies and local school districts have responded to such mandates with a number of programs, usually labeled as "beginning teacher induction." Teacher induction is defined as "a professional development program that incorporates mentoring and is designed to offer support, guidance, and orientation for beginning teachers during the transition into their first teaching job; these programs help teachers through their first year by supporting ongoing dialogue and collaboration among

teachers which accelerate the new teachers' effectiveness and increases student achievement" (LINCS, 2015, p. 2).

Before 1980, very few formal induction programs existed in the United States. Their inception was created by a projected teacher shortage in the mid-1980s and in response to "professionalization efforts" ignited by a number of reform groups (Holmes, 1986, Goodlad, 1984). By the early 1990s, 31 states were either planning or offering induction programs, but only 26 existed a decade later due to budget constraints (Nielsen, Barry, Addison, 2007). In 2016, the Education Commission of the States (ECS) had produced a study that highlighted state requirements for local school districts relative to the provision of induction programs for beginning teachers. Table 1 presents those requirements for 29 states (Goldrick, 2016). A newer report by the ECS indicates that as of 2019, 31 states require one to three-year induction programs for their new/beginning teachers.

 Table 1

 State Policy: New Teacher Induction Requirements

Required, with no minimum program length	Required for one year	Required for two years	Required for more than two years		
Colorado	Arkansas	California	Delaware		
Rhode Island	Kansas	Connecticut	Hawaii		
Wisconsin	Kentucky	lowa	Louisiana*		
	New Jersey	Maine	Maryland		
	New Mexico	Missouri	Massachusetts		
	New York	Vermont	Michigan		
	Oklahoma		North Carolina		
	Pennsylvania		Ohio		
	South Carolina		Utah		
	Virginia				
	West Virginia				
3 states	11 states	6 states	9 states		

In 2004, Smith and Ingersoll studied the growing body of research surrounding the benefits of new teacher induction programs, identifying two major ideas – that the quality and quantity of such offerings matter. Their study identified four induction "packages," recognizing that most school system programs consisted of more than one type of support. Through their research they found that teacher retention increased as the opportunities to engage in induction activities increased. The three percent of new teachers who engaged in no induction program activities had a turnover rate of 40%, similar to the 39% turnover rate for those teachers who received only support from a mentor and administrator. A drop in turnover resulted from those new teachers who engaged in four (27% turnover) or more induction opportunities (18% turnover) (Smith & Ingersoll, 2004). However, Smith and Ingersoll also found that less than two percent of the new teacher population reported engaging in an expansive set of experiences in a formal induction program. In their study, they suggested seven components of a high quality program – mentor in the field, administrator communication, common planning time, new teacher seminars, support network, reduced preps, and support by a teacher's aide.

A study by Jennifer Rice found that "teachers show the greatest productivity gains during their first few years on the job, after which their performance tends to level off" (Rice, 2013). New teacher induction programs are intended to accelerate the performance of new teachers and aim to improve teacher performance, increase the retention of new/beginning teachers, satisfy policy mandates related to induction, promote the professional and personal well-being of new/beginning teachers by providing them with the support and assistance needed to build skill in challenging areas such as classroom management, and integrate new/beginning teachers into the social system of the school, school system, and the community.

DeBolt (1992) observed that it takes three to five years for an individual to move from novice to experienced teacher status. This means that for the first three years, at a minimum, new teacher should be involved in a rigorous induction program that keeps them teaching and improving (Wong, 2004). Other researchers have suggested that at least three characteristics, as identified by Britton et. al., in their 2003 four-year study of induction programs in Switzerland, Japan, France, Shanghai (China), and New Zealand, should be included in what they described as a well-formed induction program. Though different in design, each of these induction programs:

- was comprehensive: highly structured, closely monitored, and rigorous with clearly defined roles for all stakeholders, or those individuals with a vested interest in the success and welfare of schools, students, and the education system,
- focused on professional learning: learning sessions designed to grow new/beginning teachers' practice and professionalism through a variety of methods, and
- included multiple opportunities for collaboration: shared experiences that utilized shared practices, tools, and language and are understood to be a crucial part of the teaching culture.

In 2002, Wong reported his findings from an expansive study of induction programs and teacher attrition rates of four school systems within the United States examined between 1999-2001. All had attrition rates between 2.2-4.4% which was far below the national average (Wong, 2002). Wong attributed the low attrition rates to the comprehensive, coherent, and sustainable natures of the four systems' induction programs. Most importantly, he reported that these school systems "train and continue to train their employees or team members according to a structured training program that is part of the induction into the organization's infrastructure, vision, and culture

(Wong, 2004, p.47). He also observed that although no two induction programs would ever look alike due to the individual culture, beliefs, values, and resources of particular school systems, Wong (2004) identified key common components within successful, comprehensive induction programs. He suggested that the induction programs most beneficial to new teachers during their first few years in the profession should:

- start the year off with an initial four or five-day orientation,
- offer a variety of scaffolded system-wide professional development,
- provide networking opportunities for new teachers to build support, commitment,
 and leadership in the learning community,
- incorporate a strong sense of administrative support,
- provide an assigned full-time mentor,
- model effective teaching during professional development and mentoring, and
- encourage and provide the opportunity, time, and means for new teachers to visit the classrooms of exemplary teachers.

After completing his research, Wong concluded that "to produce effective teachers, there must be a professional development program that improves professional skills for educators at every point in their careers" (Wong, 2004, p.48). More than a decade later in 2016, Kini and Podolsky's research findings led them to the conclusion that "the benefits of teaching experience will be best realized when teachers are carefully selected and well prepared at their point of entry into the teaching workforce, as well as intensively mentored and rigorously evaluated prior to receiving tenure" (20216, p.2). And in 2017, Ronfeldt and McQueen published the findings of their study which used the Schools and Staffing Surveys (SASS), Teacher Follow up Surveys (TFS), and the Beginning Teacher Longitudinal Survey (BTLS) to identify if there was in fact a relationship between teacher induction and teacher retention. They determined

that receiving supportive communication from school leadership, having a mentor, and attending a seminar for beginning teachers reduced the number of teachers transferring to another school from 67% to 36% and reduced the likelihood of teachers leaving the profession from 58% to 35%. Ronfeldt and McQueen found that these three most significant induction supports were predictors of teacher retention not only in the second year but also across a five-year period (p. 406).

This dissertation focuses on the components of high-quality induction programs and the need for such programs to support all new and beginning teachers. Dhandy County Public School System (DCPSS) is a medium-sized public school district in a Mid-Atlantic state in the United States. DCPSS currently serves approximately 58,000 students in its 77 schools. Because of its location, Dhandy County has seen a lot of change in the demographics of its student population over the past decade absent much change in the demographics of their teacher workforce (DCPSS, 2018). Dhandy County Public School System separation data shows that the largest number of new and beginning teachers are leaving the district after their second year of teaching and the next largest after their third year (DCPSS Annual Report, 2020). As a result, the district is hiring between 300-400 new and beginning teachers each year. Although teachers leave the district or the profession for many reasons, it is possible that new and beginning teachers lack adequate opportunities to engage in high-quality professional development to improve their teaching practice and enhance their professional capital.

Evidence Supporting the Problem

In his letter introducing the 2011 reauthorization of the Elementary and Secondary Education Act, former President Barack Obama stated "we know that from the moment students enter a school, the most important factor in their success is not the color of their skin or the income of their parents – it is the teacher standing at the

front of the classroom." (U.S. Department of Education, 2011, p. 1). The results of numerous research studies around the key contributors to student achievement over the last several decades corroborate the President's statement and indicate that teacher professional practice is the single greatest contributor to student learning (Pressley, Croyle, & Edgar, 2019; U.S. Department of Education, 2011).

The following section will discuss research regarding teacher attrition, effectiveness, and preparation at the national, state, and local levels.

National Scope of the Problem

Research has found that only one third of the annual teacher attrition is due to retirement (Carver-Thomas & Darling-Hammond, 2017). In 2011, the U.S. Department of Education summarized the findings of the National Commission on Teaching and America's Future's (NCTAF) about the teaching profession. They found that nearly 50% of new teachers leave the profession within their first five years, with approximately 14% of new teachers leaving by the end of their first year and 33% by their third year (2011). That same year, the National Center for Education Statistics (NCES) reported that teachers with 10 or fewer years of experience constituted over 52% of our teaching workforce, 22% of teachers were under the age of 30, and the number of teachers 50 and older dropped from 42% in 2005 to 31% in 2011 (U.S. Department of Education, 2011). Also in 2011, the National Center of Education's Profile of Teachers surveyed teachers and found that one third of current public school teachers do not expect to be teaching in K-12 schools and 13% expected to be retired by 2016 (2011).

Because of high teacher attrition rates, school districts rely on teacher preparation programs to equip new teachers with the skills needed to be successful within a classroom. However, over the last 10 years, there has been a constant decline in teacher preparation program enrollment and the number of individuals who complete

preparation programs. While we need more candidates in teacher preparation programs and more applicants for teaching positions who are better prepared, it is critical that we also find ways to retain the teachers who are effective in meeting the needs of students. Over the last few decades, several studies have focused on exploring the relationship between teacher experience and student achievement. Ronfeldt, Loeb, and Wyckoff's extensive 10-year study of 1.1 million New York elementary aged students found that high teacher turnover rates not only caused lower student achievement scores in English Language Arts and math but it also had a negative impact on the students and teachers who remained at the school. By reducing teacher turnover, there was an increase in student achievement in math by 2-4 percent of the standard deviation (Ronfeldt, Loeb, Wyckoff, 2013). A few years later, Kini and Podolsky (2016) released their review of 30 studies completed over the last 15 years focused on one central question, does teacher experience increase teacher effectiveness? Four key findings emerged from their review of the literature:

(1) "Teaching experience is positively associated with student achievement gains throughout a teacher's career, (2) As teachers gain experience, their students are more likely to do better on other measures of success beyond test scores, such as school attendance, (3) Teachers make greater gains in their effectiveness when they teach in a supportive and collegial working environment, or accumulate experience in the same grade level, subject, or district, and (4) More experienced teachers confer benefits to their colleagues, their students, and to the school as a whole" (Kini & Podolsky, 2016, pp. 3-5).

The experience that a teacher gains each year that they remain in the educational profession contributes to increased student achievement, decreases student absenteeism and dropout rates, and improves school culture. Though Kini and Podolsky (2016) did not suggest that every new teacher was less effective than every

experienced teacher or that every experienced teacher was more effective than every new teacher, their findings support the need for a supportive environment for continued growth of teacher professional practice throughout teachers' teaching careers. With more experienced teachers leaving education, the demand for effective programs that prepare new teachers for the classroom is urgent given the projected numbers of needed new teachers expected to enter the profession. Due to COVID-19, these programs must now prepare candidates not only to teach students in face-to-face settings, but in virtual and hybrid settings as well.

National Efforts

There have been repeated attempts to refocus America's attention on improving teacher quality and reducing attrition over the past half century. Among the most significant of such efforts was the No Child Left Behind (NCLB) Act in 2002. NCLB sought to increase the federal government's role in holding schools accountable for student academic achievement as evidenced by student standardized test scores and increased teacher quality. NCLB defined "highly qualified" teachers as those who have a bachelor's degree, full state teacher certification and hold a license to teach, and those who demonstrate competence in the academic subject(s) that they teach. Any teacher hired for and after the 2002-03 school year, using federal Title I funds, had to be highly qualified. According to the U.S. Department of Education (2009), "between 2004-05 and 2006–07, the number of states reporting that at least 90 percent of classes were taught by highly qualified teachers increased from 33 to 40. Among general education teachers, the percentage of teachers who reported being highly qualified increased from 74 to 84 percent, and that of teachers who reported being not highly qualified decreased from 4 to 2 percent. The percentage of special education teachers who reported being highly qualified also increased—from 52 to 72 percent" (p. 137). Other organizations

within the United States conducted additional educational studies to showcase the correlation between student achievement of various student groups and access to highly qualified teachers.

"In the United States, 67.6% of high-SES [socioeconomic status] students were taught by teachers with full certification, a mathematics or mathematics education major, and at least three years of teaching experience compared with 53.2% of low-SES students, showing the opportunity gap of 14.4%. This is significantly larger than the international average of 2.5%. The correlation results showed that the percentage of students taught by fully certified teachers, the percentage of students taught by teachers with three or more years of teaching experience, and the percentage of students taught by teachers with high overall quality (full certification, mathematics or mathematics education major, and at least three years of experience) were significantly associated with higher national achievement. In addition, opportunity gaps in students' access to teachers with a mathematics major and to teachers with high overall quality were significantly associated with a larger achievement gap. Our data confirmed the importance of ensuring a qualified teaching workforce to produce higher national achievement" (Akiba, LeTendre, Scribner, 2007, pp. 10-11).

Alternative pathways to teaching were recognized in NCLB as one of several ways to become a highly qualified teacher. Absent of much classroom experience as part of their alternative preparation, graduates of such programs often needed remedial training to be recognized as "highly qualified." Mandatory mentoring options were put into place to provide support to these individuals as well as for those teachers hired prior to 2002 lacking the necessary qualifications to be considered highly qualified. Multiple ways to demonstrate mastery of content were identified including one of the

following or a combination of teaching experience, professional development, and professional knowledge obtained through on the job training. Even with these supports and guidelines in place, highly qualified did not always equal high quality (Emerick, Hirsch, & Berry, 2004).

The Every Student Succeeds Act (ESSA) of 2015, signed by former President Barack Obama, softened some of the accountability requirements, however in some areas it strengthened language about what schools had to do. ESSA holds states accountable for monitoring their progress through the use of education plans that require states to call out and analyze academic standards, annual testing, school accountability, goals for academic achievement, and plans for supporting and improving struggling schools. The federal government provides states with the education plan template as well as financial support through subgrants, to help state educational agencies (SEAs) and local educational agencies (LEAs) implement the strategies outlined in their local accountability plans.

ESSA recognized the important role that teachers, principals, and other school leaders play in the academic lives of students and also the struggles that the education system currently faces. One funding source under ESSA, the Title II, Part A program was designed to increase access to effective educators for students from low-income families and minority students. With the new provisions of Title II, Part A funds through the amended ESSA, its creators were hopeful that SEAs and LEAs would be more strategic in their utilization of Title II funds that would result in a greater impact on student success. ESSA strongly encouraged states and local agencies to use these funds to "establish and support high quality educator induction and mentorship programs that, where possible, are evidence-based and designed to improve classroom instruction and student learning and achievement and increase the retention of effective teachers, principals, or other school leaders" (U.S. Department of Education, 2016, pgs.

9-10). The document provided guidance on the development of internship programs but stressed that states had discretion to use monies in other ways to benefit new and/or beginning teacher development. The document did provide evidence that high quality induction programs had positively resulted in an increase in student performance on standardized tests and increased teacher retention, cutting the teacher turnover rate by half (U.S. Department of Education, 2016). The importance of this suggestion, high-quality induction programs, was even further supported by the numerous guidance documents and recommendations that ESSA provided to help SEAs and LEAs begin thinking about and establishing this rich resource for new/beginning teachers.

State-wide Scope

Teachers are leaving the field of education in the state in which DCPSS is located just as fast, or even faster, than the student and teacher populations are growing. On average, the state's student population increases by 2.9% each year; however, since 2010, the state's teacher attrition rate has averaged 6.7% each year. Although the state's attrition rate is slightly below the nation's average of 8%, about one third of national teacher attrition is due to retirement, compared to the state's average of 37%. As a result, at present approximately 29.3% of teachers have fewer than five years of experience and only 16.5% more than twenty (*Teacher Induction, Retention, and Advancement Act of 2016 Workgroup*, 2017). While the majority of teachers in this state leave the profession between years 1-5, the state is witnessing an increase in attrition of mid-career teachers with 5-20 years of experience (Janulis, 2017).

 Table 2

 Number of Teachers in the State Leaving the Profession

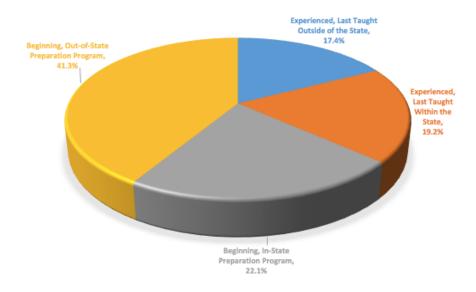
Year	Resignations						% Attritio n		
	>1	1-5	6-10	11-15	16-20	20-25	26-30	<30	
2010-11	103.0	1,441.0	685.0	287.0	169.0	172.0	138.0	546.0	5.6
2011-12	133.0	1,759.0	810.0	364.0	201.0	221.0	184.0	814.0	7.1
2012-13	128.0	1,552.0	978.0	436.0	236.0	202.0	143.0	528.0	6.7
2013-14	204.0	1,396.0	940.0	454.0	238.0	205.0	162.0	562.0	6.6
2014-15	248.0	1,457.0	953.0	502.0	284.0	218.0	217.0	554.0	6.9
2015-16	263.0	1,552.0	889.0	516.0	317.0	239.0	198.0	562.0	7.0
2016-17	231.0	1,566.0	829.0	534.0	275.0	189.0	195.0	472.0	6.6
Average	187.1	1,531.9	869.1	441.6	245.7	206.6	176.7	576.6	

Between 2010-2015, the state's K-12 student population increased by 27,390 students and within the last four years by 29,813 students (State Department of Education, 2019). In response to the growth in state public schools' student population, there was a need for an increase in its teacher workforce. The state's Teacher Induction, Retention, and Advancement Act Workgroup was organized to investigate how current practices in the state may be hindering the recruitment and retention efforts designed to place the most proficient teachers in front of its students. The increased student population caused the teacher workforce to increase by 2.9% from 58,351 teachers to 60,053 between 2011-2016 (*Teacher Induction, Retention, and Advancement Act of 2016 Workgroup*, 2017). The hiring of new teachers has also been on the rise increasing from 3,590 new teachers hired for the 2010-11 school year to 5,933 teachers for the 2017-18 school year. Notably, 59% of new teachers hired were

from out-of-state, with the majority, 41.3%, being brand new to the profession (State P-12 Dashboard).

Figure 1

New Hires: New and Beginning and Out-of-State and In-State Comparison



Note: Adapted from State P-12 Dashboard, 12/19/20

State-wide Efforts

In 2010, this Mid-Atlantic state passed the *Education Reform Act* which specifically addressed the need for professional development and mentoring opportunities for new and non-tenured teachers, as well as beginning teachers. The state's regulations went further by defining a new teacher as "a teacher who is (a) new to the profession or (b) a veteran who is new to the district" (state's regulation Sec. 13A.07.01.03). For the purposes of this dissertation, "new" teachers are those new to the profession and "beginning" teachers are veteran teachers new to the district.

The state's regulations require that all new teachers participate in an induction program until they receive tenure, and that beginning teachers participate only during

their first year in a new district. State regulation 13A.07.01.01 provides guidance to school systems around creating and offering a "high quality induction program that addresses critical professional learning needs of new and beginning teachers, improves instructional quality, and helps inductees achieve success in their initial assignments, resulting in improved student learning and higher retention in the profession" (State Department of Education, 2014, p. 1). The state's regulations indicate the need for a coherent structure to ensure an integrated, seamless system of support and flexibility for local school systems to build and organize the components of their induction program to meet the needs of their new and beginning teacher workforce. In this state, comprehensive teacher induction programs must include:

- an orientation program,
- on-going support from a mentor,
- observation and co-teaching opportunities,
- on-going professional development designed to address new teacher needs and concerns,
- on-going formative review/follow-up discussions on new teacher performance,
- induction program staff,
- reduced workload for new teachers and mentors, to the extent practical, given fiscal and staffing concerns, and
- an evaluation model.

With these new guidelines in place, the State Department of Education expected that districts would provide a more detailed and comprehensive look at new teacher performance, and provide timely support through targeted professional development designed to improve teacher practice and student learning.

A 2016 change in legislation by the state's General Assembly regarding teacher retention and induction sparked the creation of the Teacher Induction, Retention, and Incentive Act of 2016 Workgroup to investigate how current practices in the state may be hindering the recruitment and retention efforts designed to place the most proficient teachers in front of its students (Teacher Induction, Retention, and Advancement Act of 2016 Workgroup, 2017). This group of K-12 educators, representatives from Higher Education Institutions (IHE), and education policy experts, was tasked with determining effective ways to recruit, prepare, induct, retain, and promote quality educators at all levels. Through conversations and research, the group developed recommendations for the State Department of Education focused on teacher certification, financial incentives, mentoring and professional development, and standards and accountability of the state's Educator Preparation Programs (EPPs). Policies, such as those included in the Quality Teacher Incentive Act, suggested encouraging National Board Certified teachers, whose students make greater academic gains (State Department of Education, 2016; Cavalluzzo, 2004; Vandevoort & Berliner, 2004), to serve as new teacher mentors. The establishment of equitable, high quality professional development structures, options, protocols, and offerings by IHEs and Local Education Agencies (LEAs) was reflected in several recommendations as a way to better support the state's need for quality educators. With legislation no longer requiring national accreditation for EPPs or the use of the International Primary Curriculum (IPC) (State Department of Education, 2016) and the state recruiting more than half of its new teacher workforce from outside the state, there is recognition that the State Department of Education and LEAs must establish comprehensive supports geared at ensuring the quality of new teachers' practice.

Dhandy County Public School System (DCPSS)

As previously stated, Dhandy County Public School System (DCPSS) is a medium-sized public school district in a Mid-Atlantic state in the United States. Each year, the Office of Human Resources (OHR) puts out an annual report detailing the recruitment, hiring, and attrition of DCPSS. During the 2019 reporting period, 625 DCPSS employees left the system, 53.6% of which were instructional staff. The electronic system used for self-resignations allows individuals to self-select their reason for leaving, identifying the most common reasons as death, resignation, retirement, and termination. Of the 335 instructional staff members who left the system, 57.3% were due to resignations and 31.6% were due to retirements (2020). The highest percentage of those leaving the system were elementary staff (43%), followed by middle school staff (27%), and high school staff (23%) (2020). Data shared within the report also shows that since the 2006-07 school year, the largest number of teachers are leaving after their second and third year (2020). The same electronic system used for selfresignations now allows individuals leaving the system to complete an exit survey to share additional feedback regarding the decision to leave the district. Exit surveys were selected as the best option to collect information about unidentified gaps impacting employee retention due to the amount of staff turnover experienced by DCPSS each year and the limited number of OHR staff (2020).

In December 2018, the state released its star rating system for public schools in response to the new requirements of the *Every Student Succeeds Act* (ESSA). In this rating system, schools were scored in a more holistic manner around five indicators – Academic Achievement, Graduation Rate, Progress in Achieving English Language Proficiency, Readiness for Post-Secondary Success, and School Quality and Student Success. A one-star rating meant that the school scored less than 30% of the total points, 2-star between 30-45% of the total points, 3-star between 45-60%, 4-star between 60-75%, and a 5-star school earned at least 75% of the total points. In 2018,

six DCPSS schools earned a 3-star rating, 36 schools a 4-star rating, and 31 schools were awarded 5-stars. However, in 2019, the number of 5-star schools decreased to 25, while 4-star schools increased to 37, and 3-star schools to 12, coinciding with the two school years (2017-18 and 2018-19) in which DCPSS hired the largest number of new and beginning teachers.

Impact of Not Addressing the Problem

The U.S. Bureau of Labor Statistics projected that between 2014 and 2024 there would be nearly 1.9 million job openings for teachers of preschool through postsecondary (AASCU, 2017). Current teacher attrition rates are costing the nation over \$7 billion annually and school systems anywhere between \$9,000 and \$20,000 per teacher per school year (Donley, Detrich, Keyworth, & States, 2019). Loss of productivity when a more experienced teacher is replaced by a less qualified teacher is an additional cost that is not as easily calculated (Watlington, Shockley, Guglielmino, & Felsher, 2010). Costs currently necessary for recruitment, hiring, induction, professional development, mentoring, coaching, and signing bonuses for critical shortage areas such as science, math, and special education, could be funneled into creating new or improving existing educational programs for students if school systems were better able to retain their teacher workforce.

States also incur expenses separate from school systems due to teacher attrition. Dhandy County's state provides many incentives to educators including a \$1,500 tuition tax credit each year, partial or complete financial support to cover initial or renewal fees for individuals pursuing their National Board certification and a stipend of up to \$4,000 annually for those who have earned their National Board certification (State Department of Education, 2016). To attract individuals into the profession, the state offers merit-based Distinguished Scholar Awards up to \$6,000 to highly-able students who enroll in teacher preparation programs (State Department of Education,

2019). Though this award does help to attract high achieving candidates to the education field, it does not help those students who were not served well during their educational careers in K-12 public school systems. Four of every 10 new college students, including half of those at two-year institutions are required to take remedial courses (U.S. Department of Education, 2010). The added expense of additional college coursework often leads students to choose majors that will get them into careers with larger starting salaries rather than select a career in education.

A continued teacher shortage with a seeming inability to attract diverse candidates also has negative impacts on stakeholders within a school community. Both national and international studies show that diversifying the teacher workforce has many benefits for students, staff, and the rest of the school community. Educators of diverse backgrounds bring a broad range of experiences to the classroom, in addition to greater diversity of course content, readings, and curricular and teaching methods (Collins & Kritsonis, 2006). The different backgrounds, ideas, and variety of resources give students a more comprehensive view of the world in which they live and gives them the opportunity to engage with languages, foods, cultures, and beliefs that cannot be found in a standardized curriculum. When diverse staff populations mirror that of diverse student populations, students have the opportunity to interact with educators that look like them and hear their reasons for becoming a teacher, the journey that brought them to education, their beliefs that all students can succeed, and most importantly, their love, passion, and dedication to the career that they have chosen (
Commission on Innovation & Excellence in Education, 2020).

Summary. Despite "supports" put into place by state regulations and district decisions, the highest percentage of teachers in the state are still leaving the field by the end of their fifth year of teaching and the highest percentage of teachers are leaving DCPSS after their second year. The consequence of this is that "teacher turnover"

compromises teacher quality, school stability, and student achievement..." (*Teacher Induction, Retention, and Advancement Act of 2016 Workgroup*, 2017, p. 31). The impacts of teacher attrition on student achievement, school culture, and state and district finances have been documented in the literature (Carver Thomas & Darling-Hammond, 2017; Kini & Podolsky, 2016; Akiba, LeTendre, & Scribner, 2007). In addition to other remedies, every new or beginning teacher hired in the state needs to engage in a high-quality teacher induction program focused on high quality instruction, collaboration, and quality feedback to sustain their passion and dedication to the field of education.

Theory of Action

Causal System Analysis (CSA)

Over the past several decades there have been numerous research studies conducted regarding the variables that contribute to student achievement (Akirba, LeTendre, & Scribner, 2007; Putman, 2012; Kini & Podolysky, 2016). The findings from these studies show that the teacher's classroom practice is one of the most impactful factors, if not the most impactful factor, on the success of students. Contemporary national education trends now focus on educational equity for all students making it even more important that skilled educators are placed and retained in schools, especially low-performing, high poverty schools (Akiba, LeTendre, & Scribner, 2007). Evidence also suggests that experience matters (Kini & Podolsky, 2016). A review of national, state, and local separation data reveals that most teachers leave the teaching profession by the end of their fifth year (Wong, 2004; Ronfeldt & McQueen, 2017). Though teachers leave for many reasons including retirement, family or health obligations, or interest in a more lucrative career, Ingersoll and Smith (2004) found that high teacher turnover "are both cause and effect of ineffectiveness and low performance in organization" (p.31).

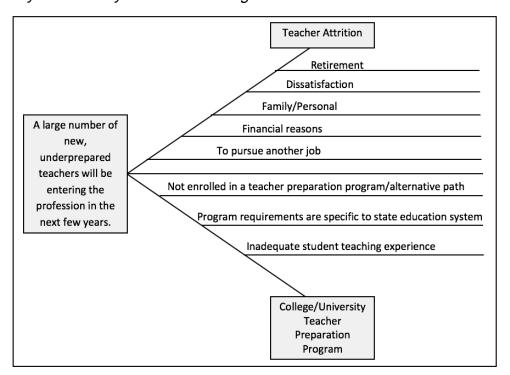
The result of completing a comprehensive literature review focused around the impact of teacher attrition, effectiveness, and preparedness and careful research and analysis of DCPSS structures relating to teacher attrition and professional development, yielded the causal systems analysis (CSA) in Figure 2 below. The scope of this analysis centers around the teacher quality gap within the district and reasons for these gaps. A primary problem of practice and two causal factors have been identified for this study.

- Problem of practice: A large number of new, underprepared teachers will be entering the profession in the next few years.
- Causal factor 1: Teacher attrition
- Causal factor 2: College/University teacher preparation program

This does not represent an exhaustive list of all factors associated with the problem of practice but allows the researcher to analyze the problem from their sphere of influence. Each causal factor (major rib) and contributing factor (minor rib) is described in the following section.

Figure 2

Causal Systems Analysis/Fishbone Diagram



Teacher Attrition.

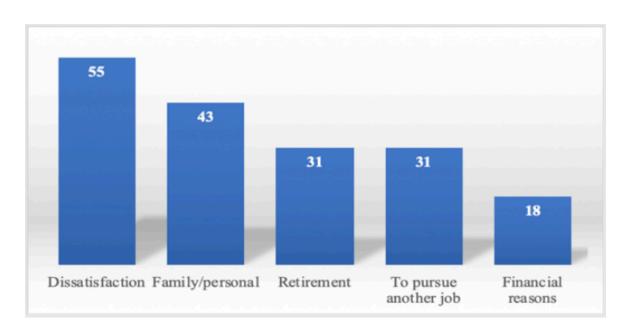
Teacher attrition, especially among new (individuals with no classroom experience) and beginning teachers (individuals new to the district with prior classroom experience), has been a major contributor to the teacher shortage problem for almost half a century. As noted by former U.S. Secretary of Education Arne Duncan a decade ago, "Over the next ten years, 1.6 million teachers will retire, and 1.6 million new teachers will be needed to take their place" (U.S. Department of Education, 2011, p. 1). The U.S. Bureau of Labor Statistics projected that between 2014 and 2024 there would be nearly 1.9 million job openings for teachers of preschool through postsecondary (AASCU, 2017). And prior to the pandemic, Sutcher, Darling-Hammond, and Carver-Thomas (2016) projected a difference of 200,000 candidates by the 2024-25 school year between the supply of teachers from both traditional and alternative sources and the demand for new teachers by the 13,500 school districts across the United States. With the COVID-19 pandemic causing greater stress, lowering morale, challenging teacher technological skills, and making more visible the access gaps that students face, that number will likely increase.

Hong (2010) writes "...a teacher's decision to discontinue teaching is generally not an immediate choice resulting from a single event. Rather, such a career decision tends to be closely associated with the teacher's own sense of self and identity as a teacher, which have been constructed, challenged, and modified throughout pre-service teacher education and in-service teaching experience" (p. 1531). From their research on U.S. teacher shortages and retention, Donley et al. (2019) found that working conditions during student teaching and in-service teaching experiences play a role in new/beginning teachers' decision to leave the profession. Due to factors such as

excessive paperwork and lack of collaborative planning time with colleagues, and lack of administrator support, special educators have a higher turnover rate than general education teachers (Donley et. al., 2019). The researchers also noted that new teachers, especially in high poverty schools, lacked access to a mentor or other professional development supports as they transitioned from learning about teaching as a student to facilitating learning as a teacher. These two reasons caused new teachers to leave due to dissatisfaction; however, the study identified four other reasons that cause teachers to leave the profession - (a) family/personal, (b) retirement, (c) to pursue another job, and (d) financial reasons.

Figure 3

Factors for Teachers Leaving the Profession



Note: From *Teacher retention* by Donley, J., Detrich, R, Keyworth, R., & States, J. (2019). https://www.winginstitute.org/quality-teachers-retention

Although there are a few instances where teacher attrition is beneficial, such as ineffective teachers leaving the profession or teachers taking advantage of district provided education leave to pursue an advanced degree and bring their new skills and

knowledge back to the district, generally, failing to retain teachers has negative impacts on schools, students, and the community (Donley et al., 2019). With more experienced teachers leaving, fewer new teacher graduates, static salaries and benefits, and a lack of fully qualified applicants, significant numbers of school districts (75% of urban districts and 60% of suburban districts) will face alarming shortages for the 2021-22 school year (FrontLines, 2021, as cited in Buttner, 2021). The lack of an adequate supply of new and beginning teachers and the high numbers of "leavers" will put pressure on school districts to ramp up efforts in recruiting, hiring, inducting, supporting, and retaining sufficient numbers of qualified and skilled educators. Amid a looming teacher shortage, we are at a critical time to consider ways to improve our trajectory.

College/University Teacher Preparation Program.

Parallel to the projected number of teachers that will be needed in the next year or two, reports from Title II of the Higher Education Act (U.S. Department of Education, 2019) over the past ten years reveal a 33.5% decline in enrollment in teacher preparation programs, as well as a 30% decrease in program completers among those who do enroll. There is little evidence to support why enrollment is declining or if the decline is seen more in certain subject areas or certain student groups. Regardless of the reason, in order to replace the teachers leaving there is a need for additional beginning teachers and better-prepared teachers.

Since the inception of formal teacher education in the United States almost two centuries ago, repeated efforts have been attempted to reform teacher preparation to better align preparation with practice (Frazer & Lefty, 2018). Preparation programs have been extended, refocused, and better aligned with school curricula while admission and graduation requirements have been modified. The common use of accreditation standards by teacher preparation programs, state reliance on Interstate Teacher Assessment and Support Consortium (InTASC) standards, and the influence of the National Board of Professional Teaching Standards, has resulted in consistency among

the more than 26,000 state-approved teacher preparation programs offered by institutions nationwide (U.S. Department of Education, 2019). However, 62% of new teachers coming out of a four-year teacher preparation program felt unprepared for "classroom realities" (U.S. Department of Education, 2011). Hong's (2010) research indicated that the lack of a bridge between theory taught in preparation programs and real-world practice accounts for a large part of the feelings of inadequacy experienced by new teachers.

There are individuals who choose to pursue a major other than education for their undergraduate degree who go into teaching after graduation. Others begin their professional careers utilizing their degree and later recognize that they have a passion for educating children. These individuals follow an alternative pathway to earning their teaching certification. Between the 1999-2000 and 2011-2012 school years, the number of alternatively certified teachers entering the profession nearly doubled from 13% to 25% (Donley et al., 2019). These teachers, who are more likely to be placed in urban schools with less resources and support, have the additional stress of successfully completing teaching certification coursework while teaching a full schedule in a school. This has been identified as a contributing factor to the higher than average turnover rate of members in this group (Carver-Thomas & Darling-Hammond, 2019). There is also evidence that suggests that there are higher turnover rates among teachers prepared in out-of-state preparation programs when compared to those who have completed instate preparation programs (U.S. Department of Education, 2011). No matter what path is taken to the field of education, it is crucial to provide quality programs that produce quality candidates who embrace educational equity and ensure that all students receive a quality education.

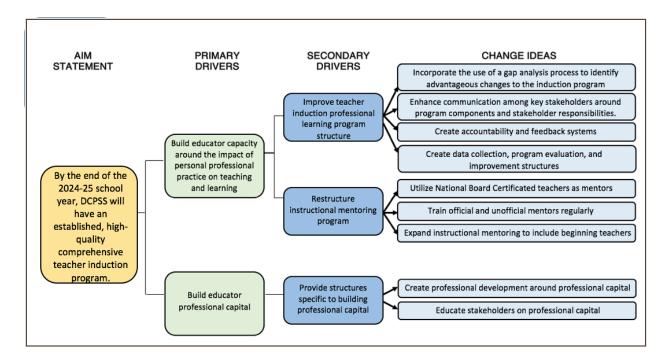
Drivers of Improvement and Driver Diagram

The CSA states that a large number of new, underprepared teachers will be entering the profession in the next few years. To address the need to prepare new teachers for the rigor that they will encounter during their first teaching experience, two primary drivers for improvement are (a) building educator capacity around the impact of personal professional practice on teaching and learning and (b) building educators professional capital. Improvement efforts for this study are focused on analyzing the current DCPSS comprehensive teacher induction program in an effort to establish a high-quality induction program by the end of the 2024-25 school year that enables new and beginning teachers to be successful in the profession.

In this section, the researcher will explain each primary driver as well as the associated secondary drivers. The change initiative proposals for this study are connected to the first primary driver, building educator capacity around the impact of personal professional practice on teaching and learning. The second primary driver was not selected due to the district's removal of time dedicated to professional development as a result of teacher and substitute shortages.

Figure 4

Driver Diagram



Build educator capacity around the impact of personal professional practice on teaching and learning. Professional identity, or what is established and maintained through the interaction in social situations and negotiation of roles within the particular context (Beijaard et al, 2000), is shaped by experiences in the teaching profession. It is important for school systems to provide new and beginning teachers with experiences that promote the creation of a positive professional identity. Professional development to build skill in challenging areas such as classroom and time management, opportunities to problem solve with new and experienced teachers in and outside of their school building, and specific, actionable feedback from supportive observers of classroom practice are the types of experiences that contribute to shaping one's professional identity. More research is needed on what constitutes teacher professional identity; however, Kelchtermans' research in 1993 identified five interrelated parts, self-

image, self-esteem, job-motivation, task perception, and future perspective. Lasky, in 2003, identified commitment, knowledge, beliefs, values, emotional well-being, and vulnerability as factors included in teacher identity (Hong, 2010). These findings can give school systems ideas of what should be included in their comprehensive teacher induction programs to address new teacher needs, develop positive professional identities, and possibly increase teacher retention.

Moving from theory learned in a teacher preparation program, to practice in a teacher's own classroom, allows new teachers more time to analyze, assess, and reflect on their personal practice and the impact it has on student learning. Reflection, as defined by John Dewey in 1933, is the "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends" (Jones & Jones, 2013, p. 74). Dewey, equating reflective thinking to the process of scientific inquiry, described it as a systematic, disciplined, and rigorous way of thinking that must be taught and practiced. Almost 70 years later, Spaulding and Wilson found that although reflective inquiry strategies are taught in some teacher preparation programs, new teachers have a hard time transferring those skills when they get a classroom of their own (Jones & Jones, 2013). Studies from Savran (2008), Kaminski (2003), and Ekiz (2006) found that pre-service biology, mathematics, and primary teachers tended to focus on learning and perfecting the technical aspects of teaching such as classroom and time management and application. This did not give them time in their pre-service experience to focus on the other two levels of reflective thinking, contextual and dialectical, as determined by Taggart and Wilson in 1998. At the contextual level, teachers can look at alternative practices that might better meet student needs based on their knowledge of students' skills, will, beliefs, values, purpose of the lesson, and available resources. The

dialectical level brings in the knowledge of oneself, student needs and interests, and moral, socio-cultural, and socio-economic subjects that affect the educational atmosphere (Dervent, 2015). In her research, Dervent found that through intentional, guided practice, and giving pre-service teachers multiple opportunities to experience utilizing all three levels of reflective thinking, it led to the increased utilization of reflective practices after completion of the pre-service program and during their first inservice experience (Dervent, 2015). Since the art of teaching takes time, and is often done in isolation, it would be beneficial for teachers to possess the skills to regularly engage in reflective practices in order to learn, grow, and gain confidence in their craft.

Two secondary drivers were identified related to this primary driver. They are (see Figure 4):

- Improve teacher induction professional learning program structure. Induction
 programs should be designed to build teacher capacity around critical skills as
 well as their own professional identity. Skills to assess the impact of their
 teaching practice on student learning are necessary for teachers to take an
 active role in discussions around their professional practice and guide their
 decisions regarding additional skills they may need to advance to a position
 outside of the classroom.
- Restructure instructional mentoring program. Mentoring, though sometimes used synonymously with induction, is only one important piece of a comprehensive induction program. Mentoring is an action, defined as the "one-on-one assistance and support given by an experienced professional to a novice" (Russell, 2006, p.
 - 1). Mentors help new teachers navigate the transition from being a student of teaching to a teacher of students. Research does indicate that mentors can also be beneficial to those teachers who migrate to another school or school district at any point in their teaching career.

Build educator professional capital. Capital is the investment of goods or assets in order to get a return. Professional capital is defined as "a function of the interaction of three components: human capital, social capital, and decisional capital" (Fullan, 2016). This approach recognizes the complexities of teaching, the technical knowledge needed to communicate content, and the skills needed to make wise decisions and deal with difficult adults. The three components of professional capital are defined as (a) human capital, the talent of each individual, (b) social capital, the group's collaborative power, and (c) decisional capital, the wisdom and expertise to make sound judgments (Hargreaves & Fullan, 2013).

Researcher Carrie Leana conducted a study in 130 New York City elementary schools aimed at illustrating the connection between social capital and human capital. In her 2011 study, she collected the qualifications of educators (human capital), documented answers to questions such as "To what extent do teachers in this school work in a trusting, collaborative way to focus on learning and the engagement and improvement of student achievement?" (social capital), and then measured math achievement in September and June (Hargreaves & Fullan, 2013). In her paper entitled *The Missing Link in School Reform*, she shares her findings:

We found that the students of high-ability teachers outperformed those of low-ability teachers, as proponents of human capital approaches to school improvement would predict. More significant were the interactions between human and social capital. Students whose teachers were more able (high human capital) and also had stronger ties with their peers (strong social capital) showed the highest gains in math achievement. Conversely, students of teachers with lower teaching ability (low human capital) and weaker ties with their peers (weak social capital) showed the lowest achievement gains. We also found that even

low-ability teachers can perform as well as teachers of average ability if they have strong social capital. Strong social capital can go a long way toward offsetting any disadvantages students face when their teachers have low human capital (Leana, 2011, p. 6).

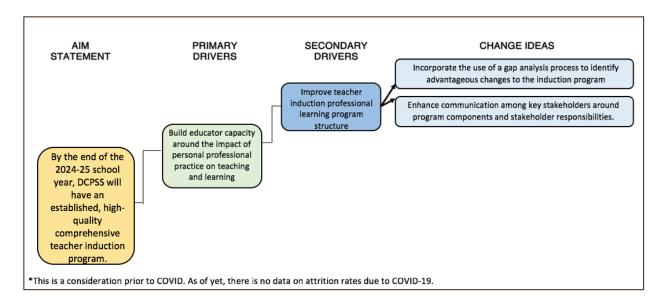
One secondary driver was identified in connection with this primary driver.

• Provide structures specific to building professional capital. Hargreaves and Fullan (2013) describe social capital as the most influential piece of professional capital to produce change faster and more effectively. This requires varied and regular opportunities for teachers to interact with, learn from, and problem solve with one another to, as a team, provide students with the educational experiences they need to be successful.

The aim of this study is to establish a high-quality comprehensive teacher induction program by the end the 2024-25 school year. The primary driver chosen as the focus for this study is to build educator capacity around the impact of personal professional practice on teaching and learning. The secondary driver, improving teacher induction professional learning program structure and two change ideas, (a) incorporating the use of a gap analysis process to identify advantageous changes to the induction program and (b) enhancing communication among key stakeholders around program components and stakeholder responsibilities will be utilized to achieve the stated aim. Figure 5 shows the selected primary and secondary drivers and change ideas that this study intends to explore.

Figure 5

Theory of Action: Driver Diagram



Description and Analysis of Prior Attempts

DCPSS offers several opportunities to their new and beginning teachers as part of their comprehensive induction program. In recent years, there have been some modifications to portions of the induction program in the hopes of better meeting the needs of new and beginning teachers. The section below describes the changes to selected portions of the induction program as of the 2018-19 school year. No changes have been made to the structure or content of the new educator orientation (NEO) or to the requirements of school and administrator support.

• Framework in Action 1 (FIA1): attendance at this three-day experience during the school year, once voluntary, is now required for all new and beginning teachers. With the district's increased diversity in their student population, information shared during these sessions has been altered to include a focus on equity and equitable instructional practice and the connection to the district's *Strategic Call to Action*. Instead of grouping all new and beginning teachers together, separate

- training sessions have been created to focus on each group's specific needs.

 During each session, time is allotted for the two groups to work independently and together.
- Instructional Mentors (IMs): instructional mentors are only provided to teachers new to the profession. For the 2018-19 school year, each mentor was required to complete three non-evaluative observation cycles which included a pre-observation conference, non-evaluative observation, and post-observation conference. For the 2019-20 school year, the number of non-evaluative observation cycles decreased to two. Professional development for instructional mentors are held throughout the year and attendance is encouraged. Three professional development sessions were held during the 2018-19 school year however that number was decreased to two sessions for the 2019-20 school year. Mentors were asked to complete a minimum of two support visits each year in addition to the non-evaluative observation cycles.
- Teacher Development Liaisons (TDLs): in each school the person to fill this position is identified at the end of the school year. Principals and TDLs attend a mandatory training session together at the start of the year to identify agreed upon actions, responsibilities, and accountability structures for the TDL role. The individual in this role focuses on increasing new and beginning teachers' knowledge of the Danielson Framework used for teacher evaluation.
- Curricular Professional Development: the scheduling of district-wide curricular
 professional development is dictated by the calendar committee that meets
 annually. According to the calendar committee's decision, professional
 development can occur twice at the beginning of the school year or once at the

- beginning of the year and once in the middle of the school year. Topics are chosen independently by curricular office leaders.
- Framework in Action 2 (FIA2): this three-day experience during the school year now requires mandatory attendance of all second year teachers new to the profession. Beginning teachers in their second year are not required to attend or participate in any induction activities after completing their first year in the district (Director, Office of TPD, personal interview, October 7, 2020).

Despite changes made to the induction program in DCPSS, evidence suggests that gaps still exist between the components outlined in the state's regulations and Wong's Induction Framework. For example, because teacher retirements and resignations occur at any point in the calendar year, all teaching positions are not filled prior to New Teacher/Educator Orientation (NEO) in August. Teachers hired after the start of the school year do not have the opportunity to experience NEO until the beginning of their second year the following school year. These newly hired teachers do not engage in an orientation prior to beginning their teaching career nor have the opportunity to meet with key individuals within the district, explore content and curricular resources with their colleagues, and set up their classroom properly. Individuals have reported not knowing to whom questions and concerns should be addressed, leading to a sense of being overwhelmed and inadequately supported in their position.

The changes to Framework in Action 1 and 2 (FIA 1 and 2) have been greatly appreciated by both new and beginning teachers and district personnel (Director, Office of TPD, personal interview, October 7, 2020). Now that the experiences are mandatory, all new and beginning teachers are getting the same information from the same source, the Office of Teacher and Paraprofessional Development (TPD), taking one responsibility off of school administrators. As a result of budget cuts, the TPD office lost two members for the 2018-19 school year. With five individuals and approximately 400

new and beginning teachers hired that year, FIA 1 and 2 were offered multiple times throughout the school year. New and beginning teachers were asked to select which three-day session (each with a maximum capacity of 40 participants) they wanted to attend, some which did not start until halfway through the school year. New and beginning teachers who attended FIA 1 and 2 later in the school year were more focused on soliciting support for their end-of-year evaluation meeting rather than for their professional practice and impact on student learning (Teacher, personal interview, October 26, 2020).

Teacher Development Liaisons (TDL) are overseen by the TPD Office and are leaders within the school building responsible for welcoming new/beginning teachers and providing them with the support that they need to be successful. Professional development for TDLs is provided by the TPD Office throughout the year and each member of the TPD Office is assigned as the in contact person for a group of TDLs. Since this role is in addition to a teacher's regular workload, there can be staff turnover seen from year to year. This rotation of individuals in and out of the role results in a loss of information from the year's professional learning and sometimes a loss in support for new teachers. However, the mandatory principal and TDL retreat each year has proven beneficial by allowing the TPD office to ensure proper training of TDLs, identify supports that align with school needs, and to guarantee that all stakeholders are clear on the focus, purpose, support, and content that the TDL will provide (Director, Office of TPD, personal interview, October 7, 2020).

A comprehensive teacher induction program consists of a variety of individuals providing supports that address all new and beginning teacher needs. Though this idea is supported by research, there is a need for the clear identification of roles and responsibilities of each contributing member (Wong, 2004). DCPSS curricular offices are given the opportunity to pull all teachers together at least twice per school year. The

foci of professional developments are determined by curricular office leaders and often revolve around changes in the curriculum, national and/or state standards, and best practices in that specific field. Although this is valuable information for teachers, the professional learning can seem disjointed and irrelevant to the overall vision and mission of the district and how each teacher contributes to the achievement of the vision and mission. This lack of connection can result in teachers attending professional development sessions for compliance rather than growth or skill-building. Though it varies, curricular offices have reported up to approximately 25% of staff members taking a personal day instead of attending curricular professional development. This number has been known to increase when the professional learning day is scheduled before a three-day weekend (DCPSS Curricular Coordinator, personal interview, December 28, 2020).

The most significant shortcoming of the district's comprehensive teacher induction program comes from each stakeholder group's interpretation of induction program requirements as explained in the state's regulations. The state's requirement of on-going support from a mentor in DCPSS translates to providing only new teachers with one year of mentorship even though the induction program for new teachers spans three years, the duration for which they are considered to be non-tenured. Evaluative observations by administrators or curriculum leaders are conducted four times per year for non-tenured teachers, however the quality of the observation and follow-up discussion around practice varies depending on each observer's perceived value of the observation process. Additionally, due to increased responsibility of school administrators and decreased available time, schools with multiple administrators rarely norm their observation practices which results in uneven feedback within each school building (DCPSS Administrator, personal interview, October 11, 2020). School administrators often do not take the time to analyze new teacher observation data to

identify trends in areas of improvement and create those personalized professional learning opportunities that new and beginning teachers need to improve their practice. Also, the funds associated with the DCPSS induction program do not allow for the reduced workload of new teachers, full-time mentors, additional induction program staff, or on-going professional development addressing new teacher needs and concerns throughout the first three years of a new teacher's teaching career (Director, Office of TPD, personal interview, October 7, 2020).

Though the previous description of the district's comprehensive teacher induction program model is extensive, when compared to the components identified by Wong, it appears to be missing some key pieces. The activities designed and implemented by the Office of Teacher and Paraprofessional Development (TPD), such as FIA 1, FIA 2, and NEO, are designed to grow new teachers' understanding of the Danielson Framework, to work with diverse student populations, and to include time for reflecting on professional practice. Each activity offered by the TPD office is evaluated for effectiveness using Guskey's professional development model. Over 85% of respondents in the 2019-2020 school year responded positively to each activity, expressing appreciation for the time to collaborate and reflect (Director, Office of TPD feedback review, October 7, 2020). However, what happens in the school buildings is left up to building administrators and no data is required to be shared with district office leaders. The elements of a comprehensive induction program described by Wong are easier to identify at the county level, than at the school level. This study will focus on identifying the district's comprehensive teacher induction program components present at the school and district level as well as missing components, at both levels, that are essential to new teacher growth. Many of the elements described by Wong are included

in the requirements outlined by the state's regulations. The table below illustrates how the district compares to Wong's Induction Framework and the requirements identified within the state's regulations.

Table 3

Wong's Induction Framework Components, State Induction Program Requirements, and

DCPSS Comprehensive Induction Program Components

Wong's Elements of a Comprehensive Induction Program	DCPSS	State Regulations	DCPSS
Start the year off with an initial four or five-day orientation	√ three or four- day	An orientation program	4
Provide an assigned full-time mentor		On-going support from a mentor	√ Mentors have other full-time responsibilities
Offer a variety of scaffolded system-wide professional development	√ Offerings are limited and mandatory	On-going professional development designed to address new teacher needs and concerns	V
Incorporate a strong sense of administrative support		On-going formative review/follow-up discussions on new teacher performance	√ Follow-up conversations are inconsistent throughout the county
Encourage and provide the opportunity, time, and means for new teachers to visit the classrooms of exemplary teachers		Observation and coteaching opportunities	√ Co-teaching is offered inconsistently throughout the county
Provide networking opportunities for new teachers to build support, commitment, and leadership in the learning community	√ At county professional developments	Reduced workload for new teachers and mentors, to the extent practical, given fiscal and staffing concerns	
Model effective teaching during professional development and mentoring	1	Induction program staff	4
		An evaluation model	٧

Extensive research has been conducted by numerous groups and individuals around the positive impact of high quality induction programs, providing a rationale for the large-scale investment in new teacher training by state education agencies and local school systems. The concentration of effort on new and beginning teacher development most often during the initial one, two, or even three years of practice, is significant. All stakeholders, directly and indirectly involved in the education realm, know the importance of the success of new teachers, as well as the importance and need for strong supports for continued growth in effective practice. The assumption has been that effective in-service training would both increase the efficacy of new and beginning teachers and compensate for or overcome the deficiencies of pre-service preparation.

The challenge has been to find ways to evaluate the efficacy of professional development targeted to new and beginning teachers. Effectiveness of these teachers has been measured through teacher performance assessments (observations of practice conducted by well-trained observers), student performance assessments (value added), or the retention of new and beginning teachers. One way to measure the success of induction programs for new and beginning teachers is through a reduction in teacher attrition. The current shortage of new/beginning teachers and high rates of teacher attrition prompt consideration of teacher attrition as a key way to measure success. Though the research on induction programs is still relatively young, it has shown that teacher retention is more closely aligned to the quality of the teacher's first teaching experience than the academic performance of the novice or quality of the teacher preparation program (Nielsen, Barry, Addison, 2007).

Critical Analysis of Possible Solutions

A review of Smith and Ingersoll's research reveals the impact of both the quality and quantity of an induction program. Quality induction programs are even more important now with the COVID-19 pandemic exacerbating teacher feelings of

unpreparedness as they move between in-person, face-to-face teaching, virtual instruction, and hybrid instruction with little to no transition time. Lower enrollments in teacher preparation programs along with higher attrition rates due to pandemic challenges and teaching assignments outside of their certification, produce shortage conditions which many states are responding to by lowering requirements and enabling more provisionally certified novices to enter teaching. High quality induction programs have the potential to get more novice teachers past the tenure hurdle and keep them in the field of education for more than five years.

It is imperative for school systems like DCPSS to take measures now to engage new teachers in a comprehensive teacher induction program that provides them with the skills and support to make education their lifelong career. Educational expertise gained and developed through intensive professional learning opportunities increases teacher, team, and school effectiveness. Teams that stay together for more than two years have a synergy that allows them to utilize each members' strengths and expertise (Watlington, Shockley, Guglielmino, & Felsher, 2010). This well-oiled machine is able to employ their collective knowledge to deeply analyze the impact of professional practice on student learning and shift student learning to increase student achievement. When teachers leave, they take that knowledge and skill with them, leaving those who remain with the responsibility of training their often less experienced, less knowledgeable replacement. The changes made in the DCPSS induction program have not slowed the rate of attrition for new teachers. There is a need for further exploration of the problem as well as new, novel approaches to address it.

There are several opportunities to expand on the research that exists about the effectiveness of new teacher induction programs. Though DeBolt (1992) identified that it takes three to five years for an individual to move from novice to experienced teacher status and Wong (2004) advocates for a multi-year induction program, it is unclear exactly how long new teachers should be engaged in an induction program to get the

best results. Under state law, new teachers are considered non-tenured until the first day of their fourth year of teaching. Beginning teachers who were previously tenured in another in-state school system, receive tenure on the first day of their second year and are not required to attend induction activities after completing their first year. With the variations in teacher preparation programs, alternative route programs, and teaching expectations and requirements in states around the country, identifying induction time requirements could prove difficult and more effective if addressed individually. The variations could also attest to the need for choice in the content of each teachers' induction program experience.

In 2004, Smith and Ingersoll named seven components of comprehensive induction programs that impacted the rate of teacher attrition – mentor in the field, administrator communication, common planning time, new teacher seminars, support network, reduced preps, and teacher's aide. Through their research they acknowledged that the quality and quantity of induction programs matter. They argue that intentional and deliberate planning and execution must be completed in order to assess the quality of each component of a system's comprehensive teacher induction program. They suggest that data must be analyzed separately and together to get a full picture of its impact. From their research we know that programs with more of these attributes had a lower teacher turnover rate than those that included only one or two (Ingersoll & Smith, 2004). Dhandy County's average attrition rate of 18.4% compares to the 18% attrition rate seen in the less than one percent of teachers whose induction programs included all seven components. Yet, when comparing Smith and Ingersoll's components with the components of the district's induction program, there are components missing and a separate set of components that are employed only by DCPSS. Exploration of district

data after the addition of missing Smith and Ingersoll's components and an understanding of the impact of district specific induction components on teacher retention, job satisfaction, and feelings of support could provide beneficial information to the district's induction staff.

Teachers leave the profession for many reasons; however, it is imperative that school systems understand their contribution to teacher attrition and purposefully put supports in place to retain teachers, especially within their first five years.

Comprehensive teacher induction programs require a large investment from many stakeholders within district level offices and school buildings. By taking a deeper look at the cohesiveness of the supports that have been put in place, the program modifications made over the last few years, and identifying the presence of beneficial individual school practices and how they align with program structure and goals, interested individuals can better assess the effectiveness and impact of the DCPSS comprehensive teacher induction program on new/beginning teacher success.

Summary and Statement of Purpose for Proposed Investigation

Identified by Britton et. al, high quality induction programs are (1) comprehensive, highly structured, closely monitored, and rigorous with clearly defined roles for all stakeholders, (2) focused on professional learning designed to grow new teachers' practice and professionalism through a variety of methods, and (3) inclusive of multiple opportunities to utilize a crucial part of the teaching culture known as collaboration, or shared experiences using shared practices, tools, and language. In his article, Wong (2004) describes the key components within a successful, comprehensive induction program that have proven to be beneficial to new teachers during their first few years in the profession. They are:

- a four or five-day orientation to start off the year,
- a variety of scaffolded system-wide professional developments,

- networking opportunities for new teachers to build support, commitment, and leadership in the learning community,
- a strong sense of administrative support,
- an assigned full-time mentor,
- modeling of effective teaching during professional development and mentoring,
 and
- opportunities, time, and the means for new teachers to visit the classrooms of exemplary teachers.

Due to their lack of experience, new teachers are, on average, less effective than experienced teachers. Engaging them in multi-year, high quality induction programs has shown to accelerate their professional growth which in turn makes them more effective sooner, improves student learning, and increases teacher retention (Ingersoll & Strong, 2011).

Retaining a qualified workforce boasts many benefits for students, schools, states, and the entire country. In addition to other factors, graduating from high school improves the likelihood of better health, higher earning potential, and lower chances of incarcerations of students. Receiving a quality education from highly effective educators during the K-12 years, decreases the need for enrollment in remedial classes when attending colleges or universities, thus decreasing the financial burden of post-secondary education. For schools, besides the decrease in hiring, schools see the most benefit of retaining their staff in the culture of their school. With time together, staff have a chance to get to know one another, observe techniques, and learn and grow together. There is less stress associated with training new staff or making up for the loss of team productivity which frees up time to put the focus where it belongs, on students and instruction. School systems and national organizations would save money on the high costs of recruitment, hiring, induction, professional developments, mentoring, coaching, incentives, and other expenditures associated with recruiting teachers and could funnel

that money into creating new or improving existing educational programs for students.

Ultimately, these benefits add up to an increase in job satisfaction, a stronger,
supported, collective and committed workforce, improved educational experiences for
students, and most importantly, an increase in student achievement.

The purpose of this qualitative study was to investigate the gaps within the current comprehensive teacher induction program of DCPSS, a medium-sized public school district in a Mid-Atlantic state in the United States, in comparison to the induction program components within the state's regulations and Wong's Induction Framework. The study evaluated the components of the district's comprehensive teacher induction program through surveys, interviews, focus groups, and document analyses. Knowledge obtained through research and analysis led to the conclusion that if the researcher can identify the gaps in the current teacher induction program, then the researcher can design a more effective induction program that better meets the pedagogical needs of new and beginning teachers and provides the essential supports, guidance, and tools for improving professional practice. By identifying key components of high-quality induction programs and determining a current state related to the district's comprehensive teacher induction program, recommendations can be made for how to improve the induction experience for all new and beginning teachers that incorporates time for them to collaboratively engage with experienced educators and reflect on and improve their personal professional practice.

Section II: Study Design

Purpose Statement

Dhandy County Public School System is not exempt from the high teacher attrition rates observed throughout the country. Specifically, the district is losing a large percentage of their new and beginning teachers—those who leave after their second or third year in the classroom. While COVID-19's impact on teacher attrition remains uncertain for the 2021-22 school year, it has been reported that many new teachers who entered the profession during the 2020-21 school year had a shortened in-person student-teaching experience (often conducted remotely) and attended new teacher orientation virtually. Teachers new to the profession in the 2021-22 school year may not have had any in-person teaching experience (Piccolo, Livers & Tipton, 2021).

The purpose of this qualitative study was to investigate the gaps within the district's current comprehensive teacher induction program in comparison to the induction program components within the state's regulations and Wong's Induction Framework. The researcher chose to utilize these two resources as the foundation for the study for two reasons: (a) the official compilation of state regulations outlines the mandatory components of each district's comprehensive teacher induction programs and (b) Wong's Induction Framework identifies components of high-quality induction programs that contribute to the increased retention of teachers. The current study evaluated the gaps within the district's comprehensive teacher induction program through surveys, interviews, focus groups, and document analysis. The intent of the study was to determine a current state related to the district's comprehensive teacher induction program as well as make recommendations for how to improve the experience and professional capital of new and beginning teachers. In this study, new teachers are

defined as those who were within their first three years in the teaching profession and had no prior experience in the classroom. Beginning teachers are teachers with experience who were new to the district.

Research Questions

The following questions guided this research:

- 1. What components of high-quality induction programs are new and beginning teachers experiencing in the district's current comprehensive teacher induction program?
- 2. What are the ways in which new and beginning teachers' induction experiences reflect the state's regulations and Wong's high-quality Induction Framework?
- 3. Where do gaps exist between the current induction practices for new and beginning teachers in the district and the state's regulations and Wong's components of high-quality induction programs?

Design

The study was designed as a gap analysis, identifying the gaps between the current structure, content, and components of the district's comprehensive teacher induction program and the structure, content, and components described in research that support and build educator professional capital. A qualitative approach was selected in order to obtain a deeper understanding of the benefits and hidden or missing components of the district's comprehensive teacher induction program.

Descriptive research was used in this study to describe the experiences of new and beginning teachers who participated in Dhandy County's comprehensive teacher induction program between school years 2017-18 and 2020-21. The data was collected qualitatively but analyzed quantitatively using frequencies, percentages, and averages to determine relationships. The portions of the study that utilized descriptive research

were: surveys, an analysis of professional development feedback, and an analysis of teacher retention data.

A web-based survey was sent to all non-tenured new and beginning teachers who had completed at least one and up to three years of teaching in the district as of June 2021. Though tenured, those who had completed their fourth year of teaching as of June 2021 were also included in the study as they were the most recent cohort to complete the entire induction experience without alterations due to COVID. The survey was voluntary and used the Qualtrics platform. The survey requested that teachers identify each high-quality induction component, as described by state regulations and Wong's induction Framework, that they had experienced and in what year they had experienced it. A similar survey was given to school and curricular office leaders at the start of their focus group discussion to identify the induction program components that they offered to their new and beginning teachers.

A second descriptive qualitative component of the study was an analysis of feedback obtained from participants in the district-mandated seminars designed for new and beginning teachers, such as *Framework in Action* (FIA) 1 and 2. The feedback was collected electronically after days two and three of each three-day seminar using a Google form. A total of 169 feedback entries completed between school years 2017-18 and 2018-19 were reviewed and analyzed to determine the effectiveness of the professional learning opportunity from teachers' perspectives (see Appendix L for document analysis tool).

The final descriptive qualitative portion of the study was the analysis of teacher retention data from the district's end-of-year human resources report. The report included data on the total number of teachers hired from school year 2006-07 through 2018-19, as well as the number of new and beginning teachers who resigned within their first five years in the district. The report also included the total number of staff

members by grade level who left at the end of the 2018-19 school year and reasons for separation, identified as death, resignation, retirement, or termination. Those choosing to leave the district were not required to disclose their reason for leaving.

Qualitative aspects of the study allowed for an in-depth exploration of ideas and experiences of representative stakeholders who participated in the district's induction program. Qualitative data collected for this study were gathered through (a) individual interviews with new and beginning teachers, (b) focus groups with school and curricular office leaders, and (c) an analysis of school- and district-level documents and resources such as Canvas communities, professional learning session feedback, handouts used during professional learning sessions, and professional learning session agendas.

Documents were examined to deepen the researcher's understanding of new and beginning teacher supports provided throughout the district. For this study, "supports" refer to any technique, strategy, professional learning experience, direction, or assistance provided by a school, district office, or teacher leader that is designed to enhance a new/beginning teacher's practice and support their professional growth.

This qualitative approach helped to achieve the study's purpose of identifying gaps in the district's comprehensive teacher induction program. The data contained within program reports, professional learning handouts and evaluations, new/beginning teacher surveys and interviews around their induction experience, and focus group discussions about activities provided specifically to new/beginning teachers were used as the basis for the researcher's triangulation of information to address the research questions.

Methods and Procedures

This section describes the participants and their selection, the instruments used, and the process used to collect data.

Survey Participants

In the past four years, the district has hired over 1,000 new and beginning teachers. For this study, all new and beginning teachers hired since the 2017-18 school year and who remained in the district as of July 2021 were asked to voluntarily participate in a survey. Though teachers receive tenure on the first day of their fourth year, tenured teachers who had completed their fourth year as of June 2021 were also included in this study to obtain information from those who had recently concluded their participation in the district's entire comprehensive induction program.

The request to participate in the survey was sent via email to 1,052 teachers. The email request included background information about the researcher, the purpose and goal of the study, and a brief explanation of the task and time commitment to complete the Qualtrics survey (see Appendix A). Of the 1,052 emails sent, 245 emails were returned as undeliverable. Of the 807 new/beginning teachers who received the email, 85 opened the survey and 67 completed it in its entirety, representing an 8% response rate. Table 4 presents the distribution of teachers who completed the entire survey by grade level and years of experience. New and beginning teachers who opted to participate in the survey signed an informed consent form by typing their names into the specified text box prior to completing the survey (see Appendix C for the consent form). The final question on the survey asked participants if they would like to continue in the study by participating in a one-on-one interview.

Table 4
Survey Participants' Self-Reported Characteristics

Characteristic	Respondents count	Percent of total
School level		
Elementary	24	35.8
Middle	18	26.9
High	23	34.3
Comprehensive	2	3.0
Years of experience		
1 year	7	10.4
2 years	4	6.0
3 years	23	34.3
4 years	33	49.3
Total	67	

New Teacher Interviews

As noted above, teachers who completed the survey were asked whether they would agree to an individual interview. Two weeks after sending the email invitation to participate in the survey, the researcher reviewed survey responses to identify those who agreed to participate in a one-on-one interview. The researcher emailed new/beginning teachers who indicated their willingness to participate in the interview portion of the study to obtain their availability. As new/beginning teachers shared three dates and times that they would be available to engage in an interview, the researcher created a schedule and entered the participant name, interview number, time and date, and unique Zoom link into a spreadsheet. A confirmation email containing the same information was sent to each participant to inform them of their scheduled interview (see

Appendix B). Four weeks after sending the email invitation, the survey was closed to participants and an additional seven participants who wished to participate in an interview were contacted for their availability, entered into the spreadsheet, and sent confirmation emails.

A total of 35 new/beginning teachers agreed to be interviewed. Of them 20 completed the interview. Interviews were conducted individually, following a structured protocol and using a pre-established script (see Appendix E). The interviews allowed new/beginning teachers, who started between 2017-18 through 2020-21, to share detailed descriptions about the components of the induction program in which they participated.

Over a three-week period, 20 individual new/beginning teacher interviews were conducted virtually via Zoom. Interviews occurred before or after school hours and were recorded with participant consent. Zoom was chosen as the virtual interview platform for its recording feature as well as Zoom's transcript generation feature, which creates a verbatim record of each interview. Though each interview was recorded, the researcher took notes during the interviews. An approved protocol was used for each new/beginning teacher interview to focus the conversation. Table 5 presents the grade level and experience levels of these 20 teachers.

Table 5

Interview Participants' Characteristics

Characteristic	Respondents count	Percent of total
School level		
Elementary	7	35.0
Middle	5	25.0
High	6	30.0
Comprehensive	2	10.0
Years of experience		
1 year	2	10.0
2 years	1	5.0
3 years	7	35.0
4 years	10	50.0
Teacher status		
New	12	60
Beginning	8	40
Total	20	

Focus Group Participants

Two hundred seventy-six school and curricular office leaders were invited to participate in the study. Among the invited 276 staff members were approximately 200 school building leaders, principals, and assistant principals. According to district documents, in the 2016-17 school year, the district's superintendent restructured district leadership to include three community superintendents that supervised all levels in their assigned area instead of the previous structure where two district leaders supervised only elementary schools, one leader supervised all middle schools, and another leader

supervised high schools. This new structure created a better way for district leaders to communicate, identify, and address factors within feeder schools and provide the necessary resources and supports. Each area consists of approximately four high schools, seven middle schools, 14 elementary schools, and one education center. The intent was to include school leaders who represented all three areas and each school level.

Curricular office leaders invited to participate were coordinators, instructional facilitators, and resource teachers of all curricular offices in the district: career and technology education, elementary language arts, secondary English language arts, English for Speakers of Other Languages, fine arts, gifted and talented, health education, elementary mathematics, secondary mathematics, physical education, elementary science, elementary social studies, secondary social studies, special education, and world languages.

All 276 individuals were contacted via an email that included the researcher's background, purpose and goal of the study, and a brief explanation of the task and time commitment to participate in one focus group (see Appendix F). School and curricular office leaders indicated their interest to participate using a Google form and were required to complete an informed consent form prior to participating in a focus group discussion (see Appendix I).

Of the 276 school and curricular office leaders, 43 individuals, which included 29 school leaders and 14 curricular office leaders. Of these 43 individuals, five school leaders and four curriculum office leaders ultimately did not participate in a focus group. Four school leaders did not participate due to unexpected school responsibilities and the remaining five cited scheduling conflicts. The final number of focus group participants was 34 and they were assigned to one of 14 focus groups. Table 6 presents the characteristics of focus group participants.

Table 6

Focus Group Participants' Characteristics

Characteristic	Respondents count	Percent of total				
School leaders						
School level						
Elementary	6	25.0				
Middle	9	37.5				
High	8	33.3				
Comprehensive	1	4.2				
Area assigned						
Area 1	9	37.5				
Area 2	8	33.3				
Area 3	7	29.2				
Total school leaders	24					
Curricular office leaders						
Office type						
Elementary (K-5)	3	30.0				
Kindergarten-Grade 12	3	30.0				
Secondary (6-12)	4	40.0				
Total	10					

Each of the 14 focus groups completed had between one and four participants; used the same structured protocol, script, and time limitation; and were recorded to ensure accuracy when later identifying themes in the responses.

Instruments

Four instruments were developed for this study: a web-based survey, a teacher interview protocol, a school/curricular office leader focus group protocol, and a document analysis guide. Each instrument used for the study is described next.

Survey. A web-based survey was created with items that asked new/beginning teachers to identify the components of high-quality induction programs in which they were invited to engage. The survey used the Qualtrics platform, took approximately five minutes to complete, and consisted of six questions (see Appendix D). To ensure that participants met the eligibility requirements to participate in this study, the first three questions asked them to select the level that they currently taught, the number of years they have been in the district, and whether or not they engaged in the district's comprehensive teacher induction program. If a teacher had been in the district for more than four years or selected no for the third question, they were thanked for their time and the survey closed. Participants who met the requirements then moved to the next section of the survey consisting of two questions, one with multiple parts and the other was open ended. These questions related to the ten components of a high-quality teacher induction program, as defined by state regulations and Wong's research. Survey items required the teacher to select all components in which they had participated as well as the year (first, second, or third) in which they had participated in it. The item also offered an "Other" response option that allowed the respondent to type in other induction activities not included in the item response options. The survey ended with a yes or no question asking if the participant wished to continue in the study by participating in a one-on-one interview with the researcher to deepen the researcher's understanding of the induction components and their contribution to teachers' professional practice and professional capital. If a participant selected yes, they were

asked to provide their name and email for further communication. All participants were thanked for their time and contribution to the study.

School and curricular office leaders also completed a survey that mirrored the one taken by new/beginning teachers during the first five minutes of their focus group. Leaders began with two introductory questions asking for the level that they supervised and if they contributed to any portion of the comprehensive teacher induction program. They were then presented with the same 10 components of high-quality induction programs and asked to identify which experiences they offered to new/beginning teachers in the school building and in which year (first, second, or third). The final openended question allowed school and curricular office leaders to identify additional induction activities that they provided that were not already listed in the survey.

Interview and Focus Group Protocols. The structured and pre-approved questions that guided both the individual interviews with teachers and focus groups with leaders were directly aligned with the state's regulations and Wong's components of a high-quality induction program. The interview and focus group protocols each included 10 questions (see Appendices E and M). The first question asked about the participant's familiarity with the district's comprehensive induction program. The next set of questions were specific to different aspects of a high-quality induction program, including opportunities for mentoring, professional learning, collaboration, co-teaching, observation of experienced teachers, administrator support, and networking opportunities. The teachers were asked if and when they experienced or participated in a particular component. School and curricular office leaders were asked if and when they provided each experience or component to new/beginning teachers during these teachers' induction program experience.

Document and Resource Analysis. Multiple documents and resources created for and utilized by new/beginning teachers were examined for this study. During focus group discussions, school and curricular office leaders were asked to share electronically documents that were important to their contribution to the comprehensive teacher induction program. The researcher also obtained several district resources critical to the implementation and success of the district's induction program. A fourcolumn Google document was constructed to capture each resource's name, content, and connections to components of the state's regulations and Wong's Induction Framework; as well as any components that were not addressed or referenced by the resource. In the first column, the researcher recorded the name of the document or media source. A brief, one to two sentence summary of the content within the resource was recorded in the second column. Professional development outcomes, objectives, and purpose were also noted in this column. The third column detailed information that directly related to the state's regulations or Wong's ten induction program components. Components that were not addressed, stakeholder groups that were not acknowledged, and missing or inaccurate information within the resource were documented in the fourth column of this document review guide.

Procedures

The study began after the researcher obtained approval from the Institutional Review Board (IRB) at the University of Maryland, College Park (UMD) and the district's external research review committee (see Appendices M and N). The study was conducted in three phases. First, the new/beginning teacher survey was administered. Next, focus groups and individual teacher interviews were scheduled. Once the focus groups and interviews were completed, district documents were reviewed for the document analysis portion of the study.

Phase One

In the first phase of this study, at the researcher's request and with district approval, the district's Office of Teacher and Paraprofessional Development staff shared the Google spreadsheets containing the names of new/beginning teachers hired between 2017-18 through 2020-21. Using these lists, the researcher sent a research recruitment email to all new/beginning teachers during the Fall of 2021. The link to the new/beginning teacher Qualtrics survey was included in the pre-approved email requesting voluntary participation in this study. Teachers who wished to participate clicked on the link in the email which opened the informed consent form, that the teacher was required to sign prior to completing the survey. The researcher monitored the number of respondents and sent a reminder email a week and a half after the initial request to solicit participation (see Appendix G). The window for teacher participation in the survey was terminated two and a half weeks after the reminder email was sent. A total of 67 teachers completed the entire survey.

Phase Two

Individual Interviews. In the second phase of the study, the researcher contacted teachers who responded to the survey indicating that they wished to continue in the study by participating in a one-on-one interview. The researcher contacted each teacher via email to determine their availability. Once availability was determined, the researcher sent a confirmation email which included the day, time, and unique Zoom meeting link for the individual interview. Initially, 35 of the 67 teachers who completed the survey opted to participate in the interview portion of the study. However, 20 of the 35 new/beginning teachers actually participated in a one-on-one interview over a three-week period. Of the 15 individuals who did not participate in the interview, 13 did not respond to the email requesting their availability and two were not able to complete their interview at the scheduled time.

Each new/beginning teacher interview followed a pre-established, structured protocol. Each interview began with the researcher asking permission to record the conversation to ensure accuracy and to aid in transcribing and analyzing interviews. Once permission to record the interview was granted, the researcher explained the study purpose, which was to explore new and beginning teachers' perceptions of the district's comprehensive teacher induction program and its components. The researcher thanked participants in advance for their contribution to the study and assured them that their names, schools, and responses would be kept confidential. The interview then began and proceeded through the 10 questions. The researcher asked each question and used specific prompts if an individual's response lacked depth or did not fully answer the question asked.

At the end of the interview, the researcher thanked participants again for their time and contribution to the study, assured them of the confidential nature of their responses, and explained that interview transcripts and recordings would be used to identify themes, commonalities, and differences in new/beginning teacher induction experiences.

Focus Groups. During the four week new/beginning teacher survey window, all school and curricular office leaders were contacted via email and invited to participate in the study. The email invitation sent to school and curricular office leaders included a link to a Google form for potential participants to indicate their availability to participate in a focus group. A total of 43 school and curricular office leaders indicated interest in participating however due to scheduling conflicts, 34 of the 43 leaders actually participated in one of 14 focus groups. The researcher sorted school leaders into groups by school level and availability; and sorted curricular office leaders into groups based on their availability. The researcher created a spreadsheet to document focus group logistics and sent a confirmation email to each school and curricular office leader

with their focus group number, focus group time and date, a unique Zoom meeting link, and a brief explanation of the study (see Appendix H). Four individuals who wished to participate in the study missed their focus group time or were not available during the scheduled focus groups. Focus groups followed a pre-established protocol and were recorded. The researcher took notes as focus group participants shared their understanding of the district's induction program and their contributions to it.

Each focus group began with the researcher asking for permission to record the session followed by each participant completing a five-item Qualtrics survey that asked them if and when they offered a specific induction program component to new/beginning teachers (see Appendix J). After all participants in the focus group had completed the survey, the researcher facilitated a discussion guided by participants' responses to each of the survey questions (see Appendix K). Focus group questions were similar to those asked of the new/beginning teachers, but focused on what leaders provided.

Focus group participants described how they addressed each component, the intended outcomes, and general perceptions and/or evidence of their effectiveness. They also shared when a specific component was offered to new and beginning teachers. At the conclusion of each focus group, the researcher thanked participants for their time and contribution to the study, assured them of the confidential nature of their responses, and explained how the results would be used.

Phase Three

The researcher selected 16 documents and resources associated with the comprehensive teacher induction program for review after the completion of the new/beginning teacher interviews and school and curricular office leader focus groups. Resources that were created, utilized, and maintained by the district office were evaluated for their content and concepts according to state regulations and Wong's research. These resources included lists of Canvas communities, professional

development agendas and evaluations, and new educator orientation (NEO) agendas. Four curricular office Canvas communities' pages and resources associated with NEO were also reviewed for this study. The district's annual human resources report, which includes the separation data for cohorts of teachers leaving the district during their first five years, was also included in this document analysis. The researcher was granted access to these resources by school and curricular office leaders after their participation in a focus group discussion. All resources were shared via Google or through the district's learning management system, Canvas. Utilizing a four-column table in a Google document, the researcher entered the name of each resource into the first column and summarized its content in the second column. The researcher used the third and fourth columns to describe connections to and missing components of the state's regulations and Wong's Induction Framework.

Analysis

The various study components were designed to address one or more of the research questions. Analyses of new/beginning teacher and school and curricular office leader surveys, interviews, and focus groups assisted in addressing research questions one and two. Findings from all aspects of this study addressed research question three, "Where do gaps exist within the current induction practices of the district and the state's regulations and Wong's components of high-quality induction programs?"

Survey Data Analysis

The survey results from both new/beginning teachers and school and curricular office leaders were used to answer the first and second research questions, "What components of high-quality induction programs are new and beginning teachers engaging in within this district's current comprehensive teacher induction program?" and

"What are the ways in which new and beginning teachers' induction experiences reflect the state's regulations and Wong's high-quality Induction Framework?" The surveys obtained perspectives from individuals who participated in the induction program and from those who were responsible for implementing the induction program. The researcher downloaded the new/beginning teacher Qualtrics survey responses into a spreadsheet and sorted the responses to identify the components of a high-quality induction program experienced by the most to least of the participants. The researcher also used these responses to identify what components were offered during each year of the induction program, who was invited to participate in each component, which components as described by state regulations and Wong were missing, as well as what non-systemic opportunities were offered in specific schools and/or curricular areas. The researcher downloaded the responses from the school and curricular office leaders survey into a separate spreadsheet and sorted the responses to identify which components these leaders offered to new/beginning teachers and when they were offered. The researcher used these responses to identify systemic components of the district's induction program and any unique offerings throughout the district.

New and Beginning Teacher Interview Analysis

New/beginning teacher interviews provided a better understanding of the components in which new/beginning teachers engaged as well as the impact of those components on their professional practice. Each virtual interview followed a structured protocol with a pre-approved script and took up to 60 minutes. Interviews took place using the Zoom platform and were recorded with participant permission. The researcher reviewed interview transcripts three times for correct spelling, sentence structure, and accurate content. During the first review of transcripts, the researcher highlighted in yellow components of high-quality induction programs shared. Ideas concerning additions to the induction program were highlighted in blue during the second review.

Finally, in the third review the researcher highlighted in pink impacts of the induction program. Components experienced by new/beginning teachers, recommendations for beneficial additions to the induction program, and impacts of the induction program were tallied and compiled into a table to be used as supporting evidence for conclusions and program improvement recommendations.

Focus Group Analysis

Data obtained through focus group discussions were used to answer research questions one and two from a school or curricular office leader's perspective. Zoom's transcription software provided the focus group transcripts. The researcher reviewed each transcript to identify (a) high-quality teacher induction program components provided by school and curricular office leaders, (b) when supports were provided to new/beginning teachers, and (c) who was responsible for providing the supports. The first round of data review focused on identifying district-level themes concerning the current induction program, including its implementation and components. The second round of review focused on identifying commonalities among the experiences offered to new/beginning teachers throughout the district.

Document and Resource Analysis

The documents and resources reviewed for this study gave insight into the electronic, ever present information that is provided to new and beginning teachers. The researcher reviewed each document for aspects of Wong's components and the state's requirements and their connection to and use in improving teacher professional practice and professional capital. Missing or inaccurate information was also documented in the Google spreadsheet.

Institutional Review Board (IRB)

The researcher obtained UMD's IRB approval and the district's permission to conduct research in the district, and adhered to the protocols approved and conditions required by both committees. The participants who took part in this study did so voluntarily. In order to protect those who participated, the following measures were incorporated into the study design:

- New and beginning teachers and school and curricular office leaders were made aware of the voluntary nature of the study, the role of the researcher, the study purpose and goals, the expectations prior to engaging in the study, and time commitments for participating in the study.
- Those who chose to participate received and completed an informed consent form prior to engaging in any part of the study.
- Identifying information, such as school name, was not collected as part of the surveys, interviews, or focus groups.
- An established protocol approved by the UMD's IRB was followed when collecting information from interviews and focus groups.
- Aggregate data were used to support or refute study goals.
- Information collected was and continues to be retained by the researcher
 electronically on an encrypted flash drive used only on the researcher's personal
 password-protected computer.

Section III: Results, Conclusions, and Next Steps

Results

The purpose of this study was to investigate the gaps within the district's current comprehensive teacher induction program in comparison to the program components within the state's regulations and Wong's Induction Framework. The study evaluated the components of the district's comprehensive teacher induction program through surveys, interviews, focus groups, and document analyses. The following questions guided this research.

- 1. What components of high-quality induction programs are new and beginning teachers experiencing in the district's current comprehensive teacher induction program?
- 2. What are the ways in which new and beginning teachers' induction experiences reflect the state's regulations and Wong's high-quality Induction Framework?
- 3. Where do gaps exist between the current induction practices for new and beginning teachers in the district and the state's regulations and Wong's components of high-quality induction programs?

The intent of the study was to determine a current state related to the district's comprehensive teacher induction program as well as make recommendations for how to improve the experience for, and professional capital of, all new and beginning teachers. In the following sections, the results of each of the research components are presented.

New and Beginning Teacher Survey

The purpose of the new/beginning teacher survey was to help address research questions one and two. The survey helped the researcher identify the components of a high-quality induction program experienced by new/beginning teachers, based on state

requirements and Wong's Induction Framework. The responses from the survey provided the researcher with a basic understanding of the district's induction program components from a teacher's perspective. As shown in table 4, of the 67 respondents, 24 are elementary teachers, 18 middle school teachers, 23 high schools, and two teach at one of the district's comprehensive schools. As of June 2021, close to half of the respondents (49.3%) had completed their fourth year of teaching, a little over a third (34.3%) had completed their third year, 6% had completed their second year, and 10.4% had completed their first year. Proportionately fewer first- and second-year teachers responded than third- and fourth-year teachers.

Responses from the new/beginning teacher survey yielded the following information. Table 7 shows the percentage of teachers who indicated they had participated in one of 10 induction activities by the year when they experienced it.

Table 7

Number and Percent of New/Beginning Teacher Respondents who Experienced each
Induction Component by the Year in which it was Experienced

Induction component	First year			Did not experience
	n (%)	n (%)	n (%)	n (%)
New Teacher/Educator Orientation (before the start of the school year)	53 (79.1)	6 (9.0)	0 (0.0)	8 (11.9)
2. County provided mentor	40 (56.3)	7 (9.9)	2 (2.8)	22 (31.0)
3. System-wide scaffolded professional development	56 (46.7)	39 (32.5)	20 (16.7)	5 (4.1)
4. Administrative support (principal and assistant principals)	47 (42.0)	30 (26.8)	22 (19.6)	13 (11.6)
5. Visits to/observations of exemplary/ experienced teacher's classrooms	16 (23.5)	9 (13.2)	4 (5.9)	39 (57.4)
6. Networking opportunities	26 (28.3)	21 (22.8)	15 (16.3)	30 (32.6)
7. Professional development to address new teacher needs/concerns	40 (46.5)	18 (21.0)	7 (8.1)	21 (24.4)
8. On-ging formative review/follow-up discussions on new teacher performance	46 (41.8)	30 (27.3)	19 (17.3)	15 (13.6)
9. Reduced workload	5 (8.5)	3 (5.1)	0 (0.0)	51 (86.4)

10. Induction evaluation model	60 (44.1)	40 (29.4)	32 (23.5)	4 (3.0)
Other experiences in any year:				
Monthly teacher development liaison (TDL) meetings	40 (72.7)			
In-school mentors ^a	19 (34.5)			
In-school orientation	4 (7.3)			
Evaluation/Observation support from administration	10 (18.2)			
Professional development	3 (5.5)			
Teacher visits	2 (3.6)			
Check-ins with instructional team leaders (ITLs)	2 (3.6)			

^aOf the 19 responses, 12 participants specifically indicated receiving support from subject matter district mentors who were assigned to their schools including elementary and secondary math support teachers and elementary reading support teachers.

Overall, 91% (*n* = 61) of the survey respondents participated in some aspect of the district's comprehensive teacher induction program. Of the 10 induction activities, most new/beginning teachers participated in the New Teacher/Educator orientation (79.1%,), were provided a county mentor (56.3%), and received scaffolded professional development tailored to address the needs and concerns of new/beginning teachers (46.7% and 46.5%). The induction experiences that respondents experienced the least included a reduced workload (8.5%), the opportunity to visit and observe exemplary/experienced teachers' classrooms (23.5%), and networking opportunities (28.3%). Though the induction program was three years in length, induction program activities that respondents reported experiencing decreased drastically from year one to year two, and reduced even more in a new/beginning teachers' third year. In addition, 55 of the 67 new/beginning teachers responded to the "Other" option that allowed

teachers to list other induction activities that were not already listed in the survey.

Following are the reported supports in order of highest to lowest frequency, as noted after each support:

- monthly teacher development liaison (TDL) meetings (40)
- in-school mentors (19); note that of these 19 responses, 12 participants specifically indicated receiving support from subject matter mentors in reading or mathematics who were assigned to their schools by the district.
- evaluation/observation support from administration (10)
- in-school orientation (4)
- professional development (3)
- teacher visits (2)
- check-ins with instructional team leaders (ITL) (2)

A fourth-year teacher also added the following comment: "I was placed in a 'swim or sink' situation. Absolutely no support - my first three years were abusive by administration, school-based and district." Two other respondents stated that they "sought out their own mentor within and outside of their school building."

New and Beginning Teacher Interviews

The final question of the new/beginning teacher survey asked teachers if they would be interested in participating in a 60-minute, one-on-one interview that would allow them to share more detail about each individual induction experience in which they participated. The purpose of the interviews was to help the researcher determine the teacher-perceived effectiveness of the components within the current comprehensive teacher induction program. Interviews also allowed new/beginning teachers to share their opinions of what would have been helpful during their induction experience.

A total of 20 new/beginning teachers completed an interview. Of the 20 interview participants, 12 (60%) were new teachers when starting their teaching career in the district. A majority of these new teachers (83% of the 12) completed their student teaching experience in the district or attended a university within the state. Of the 12 new teacher participants, 92% were hired prior to New Teacher/Educator Orientation (NEO) and attended all three days of the event. The remaining eight teachers interviewed were beginning teachers who entered the district with seven to 23 years of prior teaching experience. The opening question for each interview, "please share your understanding of the district's comprehensive teacher induction program and its components (number of years, activities, etc.)," was used to assess interviewees' understanding of the supports that the program was designed to provide to them as a new/beginning teachers in the district. Each of the questions that followed focused on one state regulation requirement or a recommended induction program component from Wong's research. After the completion of all interviews, the researcher analyzed the interview transcripts to identify common themes among interview participant responses.

Among the 20 interview participants, the researcher identified three groups of new/beginning teachers: (a) those who were new teachers and attended the NEO before the start of the school year, (n = 11; 55%), (b) beginning teachers who attended NEO before the start of the school year (n = 7; 35%), and (c) new and beginning teachers hired after NEO (n = 2; 10%). Interview responses varied across these three groups and are reported separately for each group next. Regardless, three themes emerged across all three groups. The themes were supports to improve professional practice, administrator support, and mentoring.

Group 1: New Teachers Who Attended NEO. Eleven of the 12 new teachers interviewed were new teachers who were hired prior to NEO and attended all three days of the event. New teachers highlighted the school, curricular, and district level supports

that they engaged in as well as the supports they believed to be the most valuable during their induction experience.

Theme 1: Supports to Improve Professional Practice. The 11 new teachers who were hired before NEO and attended the full event were asked to identify and describe the supports designed to improve their professional practice that were provided by their school, curricular office, and/or the district that they believed to be the most valuable during their induction experience. All of these new teachers identified the following supports as opportunities to enhance their professional practice:

- New Teacher/Educator Orientation (NEO): a two- or three-day experience that interviewees felt was "overwhelming" with tightly scheduled, back-to-back informational sessions not considered to be immediately helpful.
- Framework in Action (FIA) 1 and 2: a two- or three-day out-of-the-school-building professional development focused on the Danielson Framework and some diversity, equity, and inclusion topics. In order to attend, new teachers had to write substitute teacher lesson plans and leave their students for the first time which they reported as challenging. Though interviewees mostly thought these activities were beneficial, one interviewee stated that they were frustrated by some of the content that was shared because it made them and other teachers uncomfortable and made one new teacher cry.
- Master Teacher Classroom Visits: curricular offices provided release time and coverage to observe master teachers at another school, or schools, within the district.
- Focus on the Framework: these monthly after-school sessions were led by the school's teacher development liaison (TDL) and focused on a variety of topics such as the Danielson Framework, administrator observations of teaching, developing student learning objectives (SLOs), conducting parent-teacher

conferences, and preparing SLO artifacts for their end-of-year conferences with their administrators. New teachers described these meetings as "a time and space for new teachers to express their struggles, frustrations, and feelings."

 In-school departmental support through regular collaborative planning or team meetings with colleagues; and opportunities to observe master teachers (often their math or reading support teacher) within the school building.

Theme 2: Administrator Support. Responses to the question about administrator support were the most variable among the 11 Group 1 teachers. On the one hand, some teachers reported a lack of administrative support. A first year teacher became emotional and cried while explaining the lack of administrative support and the unwelcome feelings and condescending language directed at them by their principal. Six of the interviewees shared that the only interaction they had with their building administrators was during classroom observations that occurred four times per year. Teachers reported that observations completed during a new teacher's first year tended to yield more useful feedback and thorough conversations about the teachers' professional practice. Teachers in their second and third years reported that pre- and post-observation conversations with administrators were shorter than year-one conversations or did not happen at all. These teachers generally felt that their administrators did not know them as human beings and only as educators. On the other hand, five of the teachers interviewed described their administrators as a "great resource" who regularly stopped by their room to check on them and to offer assistance. According to these teachers, their administrators offered an orientation to the school building during teacher in-service week, attended after school new teacher meetings, and/or visited these new teachers during one lunch block of NEO.

Of the 10 high quality comprehensive induction program components discussed during the interviews, new teachers in group 1 rated administrator support as the second most impactful factor on their professional practice and self-efficacy.

Theme 3: Mentoring. Of the 11 Group 1 new teachers interviewed, all said that the most impactful component of their induction experience was the mentoring provided. The district assigned every new teacher a mentor for one year. The mentor was responsible for implementing two non-evaluative observations and two instructional supports (such as co-planning, co-teaching, classroom visit, and data dives). Interviewees described the quality of their mentor-mentee relationship which revealed uneven mentoring experiences among new teachers. Two of the 11 new teachers interviewed stated that their mentors were ineffective because the mentors failed to provide tangible strategies that new teachers could immediately use in their classrooms. Mentees felt that the relationship was "forced" and was "just a check on a checklist." Nevertheless, these two teachers continued to work with their assigned mentor to fulfill their requirements. They did not seek or request a new mentor, but instead utilized the TDL and team leaders within their school building. New teachers who described their mentor as "effective" developed collegial friendships with the mentor that lasted for more than the year of assigned mentorship. Mentors and mentees shared phone numbers, engaged in learning opportunities outside of the district together, and/or met for coffee to catch up. New teachers shared that their mentors "cared about me as a person," "attended to my professional and emotional needs," and "helped in the creation of a safe classroom culture for me and my students." In addition to their district assigned mentor, three new teachers were also assigned an in-school mentor who helped with identifying resources within the building. All of the new teacher participants included their TDL as an informal mentor. Each school had a designated TDL who's role was to

provide regular professional learning opportunities for all new and non-tenured teachers. New teachers shared that the TDL held monthly after-school meetings regarding the Danielson Framework, SLO development and tracking, artifact creation, and parent-teacher conferences.

Group 2: Beginning Teachers Who Attended NEO. Of the 20 teachers interviewed, eight were beginning teachers. Seven of the eight beginning teachers were hired prior to NEO and attended all three days of the event. Following are comments from these seven beginning teachers related to each of the three themes:

Theme 1: Supports to Improve Professional Practice. The seven beginning teachers who were hired before and attended the full NEO event were asked to identify and describe supports designed to improve their professional practice that were provided by their school, curricular office, and/or district office that they believed to be the most valuable during their induction experience. Below are the induction experiences that they shared.

- New Teacher/Educator Orientation (NEO): teachers in Group 2 remembered best the support received as a beginning teacher attending the two- or three-day NEO experience prior to the start of the school year. Interviewees recalled a highlystructured event with ample information, but were unable to share specific content pertaining to their professional practice. They did share that "we got to hear from the superintendent," "we got to meet other new teachers in our content," or "we learned about, and got to use, Canvas."
- Framework in Action (FIA) 1: beginning teachers also remembered this two- or three-day, out-of-the-school-building experience focused on the Danielson Framework and diversity, equity, and inclusion topics. The beginning teacher interviewees indicated that they did not attend FIA 2 because it was optional for

- them. Overall, the FIA professional learning experiences were "well organized and well run by knowledgeable staff."
- Focus on the Framework: monthly, after school professional learning sessions
 led by the school's TDL that focused on the Danielson Framework for Teaching.
 Beginning teachers identified these sessions as a positive support. Four
 beginning teachers also attended these sessions during their second year and
 two attended these sessions during their third year.

Theme 2: Administrator Support. Four of the seven beginning teachers who were hired before NEO and were able to attend the full event reported that their school-based administrator team did not provide support during their non-tenured or pre-tenure years other than completing the four required observations each year, engaging in a goalsetting conference at the beginning of the year, and holding a final evaluation conference at the end of the year. These administrators did not visit interviewees' classrooms to check on their well-being or instructional practice, were not responsive to teacher needs shared via email or in-person, and did not make themselves available to answer questions or concerns. Two of the four teachers who reported a lack of administrator support had special circumstances, such as being assigned to work in two schools or being a part of a small, specialized program within the school. They attributed receiving less support due to these special circumstances. Some teachers experienced a partial or complete turnover of their administrative team, which resulted in an increase in the level of administrative support or no change at all in administrator support. Teachers described feeling "alone" or "on the outside," but were supported by other teachers and staff members within their department or building. The other three beginning teachers in this group referred to their administrators as "great," "the best," and "amazing." Especially during their first year, these teachers felt that their

administrators were supportive by providing specific, actionable feedback about their professional practice, encouraging creativity, visiting their classroom regularly for informal check-ins, and being involved with students in the school.

Theme 3: Mentoring. Only two of the seven Group 2 teachers interviewed were formally assigned an in-school mentor; three were not assigned a mentor from the district office, and the other two sought out their own informal mentor. The teachers who were assigned in-school mentors shared that there was "not a close relationship," but the mentor provided information about the school's culture, population, resources, and operations, such as how student behaviors were handled or mitigated. Informal schoolbased mentors included colleagues within the teacher's content team, the school's TDL, or those outside of the school building selected for the specialized nature of the teacher's role. Interviewees described in-school mentor-mentee relationships as more helpful than out-of-school ones because the mentor knew the student population, shared content knowledge, and were easily accessible. There were three atypical cases in which beginning teachers were assigned district level mentors. These mentors were assigned by the teacher's curricular office and not the Office of Teacher and Paraprofessional Development that is responsible for organizing the induction program. Two of the three teachers indicated that their mentor did not provide much assistance and only visited them once. The third teacher continued to regularly interact with their mentor in a close, collegial relationship. All three teachers who were assigned district mentors, shared that they had not been assigned an in-school mentor.

Group 3: New and Beginning Teachers Hired After NEO. Of the 20 research study participants interviewed, only two teachers did not attend NEO. One was a new teacher who completed their first year of teaching and one was a beginning teacher with over 20 years of teaching experience who had completed their second year of teaching

in the district. Following are these two individuals' comments related to each of the three themes:

Theme 1: Supports to Improve Professional Practice. One new teacher and one beginning teacher identified the following supports for the improvement of their professional practice.

- New Teacher/Educator Orientation (NEO): the beginning teacher missed NEO prior to starting their first year in the district and was invited to attend NEO at the beginning of their second year. The new teacher shared that the district also offered in-person participation in the NEO to individuals who started teaching in the district during the 2020-21 school year and attended the fully-virtual NEO experience due to COVID. Because both the new and beginning teachers were hired after the district's August orientation, they were given access to NEO resources, such as NEO PowerPoint presentations, Canvas community links, and Danielson Framework and teacher evaluation resources and were encouraged to explore them on their own time.
- Framework in Action (FIA): neither the new teacher nor the beginning teacher
 identified or shared their experiences with the FIA professional learning sessions.
- Focus on the Framework: monthly sessions led by their TDL focusing on the Danielson Framework components and teacher evaluation, parent-teacher conferences, and SLO creation and data collection.
- Teachers reported also participating in monthly team meetings, and felt supported by colleagues they were in close proximity to or taught the same or similar content more than their school administrator team or curricular office leaders. Both participants had friends or family members who were also teachers within the district on whom they relied for clarification, explanation, and emotional and professional support.

Theme 2: Administrator Support. School administrators were viewed as either "very supportive" or "not supportive at all." Supportive administrators were described as those who "shielded teachers from as much as possible as they ran interference between teachers and the demands district offices put on teachers." One teacher described ways their administrators regularly checked on them, introduced them to the staff, and shared their personal contact information in the event that the teacher needed to contact them outside of school hours. Because this teacher was split between two schools, they described their second administrator team as "not supportive" and "not responsive to their needs or questions," and stated that the administrators did not visit classrooms. These non-supportive administrators also did not provide or made it hard to obtain basic supplies and resources, such as a teacher desk or information regarding ways to access the copy machine.

Theme 3: Mentoring. The beginning teacher was not assigned a district mentor. The new teacher received a mentor a month or two into the school year. The new teacher described their mentor as being "helpful" in terms of improving their professional practice, answering questions about school culture or available resources, and providing emotional support. During the new teacher's first year, their mentor observed their teaching, reviewed lesson plans, and provided resources and specific feedback.

The final question of the interview, "What experience(s) could enhance the district's comprehensive teacher induction program," was used as an opportunity for all 20 teacher interviewees to add to their previous answers and/or share resources, topics, or learning experiences that they would have liked to have been included in their induction experience. The majority (17) of the 20 teachers interviewed reported knowing where to find the resources they needed and who to ask for assistance. Seven of the 11

new teachers interviewed identified the need to have the supports offered during their first year continue in their second and third, even fourth, years. The decrease in mentoring and administrator supports between Year 1 and 2 made their second year more challenging and left them feeling like they had to "fend for themselves." Three beginning teachers received district mentors although that was not common practice of the systemic induction program. The four beginning teachers interviewed, who did not receive district mentors, expressed their desire to have some sort of formal mentorship support. They identified that there was a clear way the district did things and wished there was someone who could have shared those things with them when they first entered the district. This information helped the researcher understand ways in which the induction program could be improved.

In general, the induction program components that new and beginning teachers experienced, remembered, and shared were the professional development components organized by the district's TPD Office, such as NEO, mentoring, and FIA 1 and 2. Interview data does indicate that all of the state's requirements and Wong's recommendations are reflected in the district's comprehensive teacher induction program; however, all new and beginning teachers do not experience all components. Only new teachers are provided a mentor, who is not full time as suggested by Wong, and administrative support varies from school to school throughout the district. Some new and beginning teachers have the opportunity to visit the classrooms of exemplary teachers while the majority did not and only one teacher indicated having a reduced workload during their non-tenured years. This is not surprising as the state's requirement does stipulate that this aspect is to be included only if budget and staffing allow.

School and Curricular Office Leader Focus Group Survey

The researcher conducted focus groups with 34 school and curricular office leaders, individuals who were integral to implementing the district's comprehensive teacher induction program. The 34 leaders were divided into 14 focus groups of four participants. Due to unforeseen school related situations, completed focus groups had between one and four participants. Responses from school leaders yielded three themes that were different from those found in the responses of curricular office leaders. School leaders and curricular office leaders also had different levels of understanding of the comprehensive induction program.

To begin the focus group discussion, participants engaged in a brief, five-minute survey to identify the unique opportunities aligned to the state's regulations requirements and Wong's recommendations that school and curricular leaders offered to new/beginning teachers. Questions on this introductory survey asked participants to indicate which school level or curricular office they supervised and if they contributed to any aspect of the district's induction program. Responses to these questions are presented in Table 8.

Table 8
School and Curricular Leader Supervisory Area and Induction Contribution

Response	Frequency	Contributed to induction program	
	n (%)	Yes (%)	No (%)
Supervisory area	ı		
Elementary school	6 (17.6)	6 (100.0)	0 (0.0)
Middle school	9 (26.5)	3 (33.3)	6 (67.7)
High school	8 (23.5)	2 (25.0)	6 (75.0)
Comprehensive school	1 (3.0)	0 (0.0)	1 (100.0)
Curricular office	10 (29.4)	8 (80.0)	2 (20.0)
Total	34	19 (55.9)	15

The majority of focus group participants supervised teachers at the middle and high school levels. Fifteen (44%) of the focus group participants, including 13 secondary principals and assistant principals and two special education curricular office leaders, indicated that they did not contribute to any aspect of the comprehensive teacher induction program. Table 9 displays the focus group survey results of the school- or curricular office leader-offered induction components.

Table 9

Number and Percent of School and Curricular Leaders who Reported Offering the
Following Induction Components to New/Beginning Teachers by Year Offered

Induction component	First year	Second year	Third year	Not offered
	n (%)	n (%)	n (%)	n (%)
New Teacher/Educator Orientation (before the start of the school year)	31 (64.6)	8 (16.7)	7 (15.6)	2 (4.2)
2. District-provided mentor	24 (55.8)	9 (20.9)	6 (14.0)	4 (9.3)
3. System-wide scaffolded professional development	29 (41.4)	22 (31.4)	18 (25.7)	1 (1.4)
4. Administrative support (principal and assistant principals)	26 (32.5)	26 (32.5)	25 (31.3)	3 (3.8)
5. Visits to/observations of exemplary/ experienced teacher's classrooms	26 (36.1)	22 (30.6)	20 (27.8)	4 (5.6)
6. Networking opportunities	29 (39.7)	22 (30.1)	21 (28.8)	1 (1.4)
7. Professional development to address new teacher needs/concerns	30 (44.8)	20 (29.9)	16 (23.9)	1 (1.5)
8. On-ging formative review/follow-up discussions on new teacher performance	28 (36.4)	26 (33.8)	22 (28.6)	1 (1.3)
9. Reduced workload	7 (23.3)	2 (6.7)	1 (3.3)	20 (66.7)
10. Induction evaluation model	29 (39.2)	23 (31.1)	22 (29.7)	0 (0.0)

At the end of the survey participants had the opportunity to add unique experiences offered to new/beginning teachers as part of school-specific teacher induction programming. Of the 34 participants, 27 shared additional experiences as follows:

- monthly after-school meetings with TDL in Years 2 and 3, optional (n = 12; 44%)
 - Topics included: parent-teacher conferences, preparation for Back-To-School Night, student services information, emergency lesson planning, midterms, time management, Individualized Education Program (IEP) overview, discipline/classroom management overview, and artifact collection parties
- school-based orientation before NEO or during the week of NEO (n = 6; 22.2%)
- informal administrator check-ins (n = 6; 22.2%)
- school-provided on-site mentors in Year 1 (n = 5; 18.5%)
 - Mentor/mentee meetings four times per year or monthly meetings with school-based mentors with purposeful content teacher pairing
- office hours (*n* = 3; 11.1%)
- visits to exemplary teachers' classrooms (n = 3; 11.1%)
- instructional team leader (ITL) support (n = 2; 7.4%)
- professional learning opportunities (e.g., whole staff book study of the Little Book of Restorative Justice, specialized content training) (n = 2; 7.4%)
- social committee events/new staff lunches (n = 2; 7.4%)
- in-school support from mathematics or reading support teachers (n = 2; 7.4%)
- observation meetings (n = 1; 3.7%)
- collaborative planning (n = 1; 3.7%)

Focus Group Discussions

After completing the survey, focus group participants transitioned to the discussion portion to give the researcher more detail for how induction activities were

implemented, who was responsible, and the desired outcomes for each experience. As with the new/beginning teacher interviews, the opening question, "Please share your understanding of the district's comprehensive teacher induction program and its components (number of years, activities, etc.)," served to help the researcher gauge school and curricular leaders' understanding of the components of the induction program as well as their role in and contribution to the induction program. The focus group questions that followed paralleled those used in the new/beginning teacher interview, which aligned with the 10 state regulations requirements and Wong's recommendations. The researcher used follow-up questions to clarify participants' responses. The following sections present the results of the focus group discussions for school leaders and curriculum office leaders.

School Leaders. As a whole, school leaders' descriptions of the district's comprehensive induction program had fewer components and supports than what was described by curricular office leaders. Forty-four percent of the school leader participants, all of whom were secondary administrators, indicated that they did not contribute to the induction program in any way. Of the 24 school leaders who participated in a focus group, 19 gave an answer other than three years when asked how long the district's comprehensive induction program lasted. All 24 participants named the district's Office of Teacher and Paraprofessional Development (TPD)as the office responsible for the induction program.

Based on an analysis of school leaders' focus group responses, the researcher found no indication of a formal in-school induction process that was consistent from year to year, assessed for effectiveness, or revised when necessary. The primary focus for school-based leaders, especially during the first in-service week before students

returned to the building, was to welcome new/beginning teachers into their school community. School leaders reported a variety of ways in which they welcomed new/beginning teachers. Two school leaders began building relationships during the interview of the potential teacher candidate, prior to an official offer of employment. These school leaders immediately began thinking about the team that they believed would be the best fit for the new/beginning teacher. These school leaders also began identifying the classroom and physical resources as well as personnel resources that would be most beneficial to the new/beginning teacher. Once a teacher officially accepted an offer of employment at their school, these leaders would reach out to their new team member to invite them to the school, show them around the building, and gift them school "swag." Other school leaders (25%) prioritized a new/beginning teacher luncheon during in-service week. This luncheon gave new/beginning teachers an opportunity to ask questions and interact with teacher leaders, such as their department ITL, school TDL, and school administrators. These teachers would also leave with school "swaq." Leaders lifted up the need to check in regularly with new staff, have an open-door policy, be present in the hallways, and approachable throughout the entire school year, not just during the teacher's first in-service week.

A second theme that surfaced was related to who was responsible for providing supports to new/beginning teachers. Administrators relied heavily on their teacher leaders to support new staff. Teacher development liaisons (TDLs) were responsible for ensuring that new staff had a deep understanding of the evaluation model and the evaluation system components (observations, conferences, and artifacts), as well as providing new staff with after-school professional learning experiences focused on topics that new/beginning teachers would encounter each month. Four administrators (16.7%) met with their TDL over the summer to construct a plan for when specific professional learning topics would be discussed whereas others (20.8%) actively

participated in these meetings throughout the school year. A few administrators (12.5%) indicated that their TDL collected feedback from teachers for each professional learning experience, but could not identify how the information was used to support new staff learning. TDLs were identified as new teacher mentors in those schools that did not formally assign in-school mentors to new/beginning teachers.

Instructional team leaders (ITLs) were another group of teacher leaders that administrators relied on to assist new/beginning teachers. Grade-level and content ITLs were responsible for ensuring that new staff felt included in the school community. ITLs made sure that new staff participated in collaborative planning sessions and were identified as the "go-to" people for pedagogical and curricular needs. No administrator engaged ITLs or TDLs in professional learning to support ITL and TDL individual goals or professional practice. School leaders perceived that TDL growth was the responsibility of the district's TPD Office and ITL growth was the responsibility of the district's Leadership Development Office.

Mentoring was another theme that arose during school leader focus groups. All 24 school leaders stated that curricular offices were responsible for assigning non-school based, district-level mentors to all new teachers. Responses suggested that school leaders had no concrete understanding of how mentors were assigned, nor was there collaboration or conversation between the district-level mentors and secondary school administrators. Elementary schools had individuals who served as reading support teachers (RSTs) and math support teachers (MSTs). RSTs and MSTs were assigned to one to two schools in the district. School leaders described RSTs and MSTs as master teachers who assist all teachers with the implementation of new programs or strategies. If a new teacher happened to be in the MST's or RST's assigned school, these support teachers were named as that new teacher's district-level mentor. As a result, RSTs and MSTs had up to three official mentees, in addition to informal mentees

each school year. School leaders shared that RSTs and MSTs spent a majority of their time in classrooms mentoring teachers by observing, co-teaching, co-planning, and providing support as needed.

Math instructional support teachers (MISTs) were the secondary-level mathematics teacher support staff assigned to schools. Due to budget cuts, the number of MISTs had decreased to six even though the district had 33 middle and high schools. Thus, some schools were not assigned a MIST, some had a MIST in their building one or two days a week, while others had a MIST in their building for the majority of the week. Similar to RSTs and MSTs at the elementary level, if a new teacher was hired in their assigned school, the MIST was named as their district-level mentor who was responsible for observing, co-teaching, co-planning, and providing other supports as needed. MISTs met with the district's Secondary Math Curricular Office every other Friday for professional learning and sharing of thoughts, ideas, and experiences.

Other themes related to the current induction program emerged from the administrator focus groups. Middle school administrators shared that they often use the implementation of common planning time for all content areas and the involvement of new/beginning teachers in social and school committees to encourage networking among staff. The majority of administrators (87.5%) commented that it would be beneficial to bring back the dedicated day during NEO for new/beginning teachers to spend in their school building instead of the current practice of having school leaders join their new staff for one lunch period during one day of NEO. Due to the overwhelming number of mandatory professional learnings scheduled during the first inservice week, administrators expressed difficulty in finding time with their new staff without taking away the time new/beginning teachers had for essential activities such as setting up their classrooms or engaging in collaborative planning. Administrators also advocated for the following: a formal year-at-a-glance document which outlined the key

components of the comprehensive induction program and when each component occurred; increased partnership between themselves, curricular offices, and other district office offices; and additional supports for beginning teachers, those with experience but new to the district.

Curricular Office Leaders. All 10 of the curricular office leaders who participated in a focus group knew that they contributed to the district's comprehensive induction program since they are an essential part of NEO. The district's Office of Teacher and Paraprofessional Development (TPD) also consulted curricular office leaders when assigning district-level mentors to new teachers. Eight curricular office leaders shared that they had a moderate understanding of the district's comprehensive induction program and its components. Six of the ten participants knew that the induction program lasted for three years. Curricular office leaders communicated that pedagogy and effective communication of content knowledge were the primary foci of the induction program.

Taken together, participants' responses suggested a lack of consistency between curricular offices in providing support for new/beginning teachers. Due to additional staffing in one office, they were able to provide targeted in-school support for new and beginning teachers. Due to additional grant funding, another office was able to provide substitutes for new teachers to leave their buildings and travel with a small cohort of new teachers to other schools to observe exemplary teachers in their specific content areas. These two offices had long-standing relationships with local universities and could begin building relationships with candidates prior to their employment in the district. Because a new or beginning teacher may serve as the only person in their role within the school building, one office was able to provide all new and beginning teachers with a mentor outside of their school building. Given the necessity of following federal

mandates one office was able to share information gradually with their staff over a period of time; this gave new and beginning teachers time to learn and practice a few skills at a time. Due to the structure of the district's induction program, two offices did not get much time with their staff outside of NEO to provide resources specific to the implementation of their content area.

Curricular office leaders' responses to focus group questions suggested that all offices had a few things in common, such as not providing individualized or specific support for new or beginning teachers after their first year. All professional learning experiences that were offered through curricular offices were to benefit all teachers regardless of their career stage. Curricular office leaders also agreed that NEO was a truncated experience that was overwhelming for new/beginning teachers. In an attempt to accommodate for this shortfall, all curricular office leaders asked exemplary, experienced teachers to lead various sessions and facilitate hands-on lessons during NEO that modeled good instruction. These sessions helped new teachers see how lessons were implemented in classrooms and experience the type of learning in which they should be engaging their students. By bringing in experienced teachers from all over the district, these sessions also helped new/beginning teachers make connections, share expertise, and build their support system. The final commonality that surfaced from the curricular leader focus groups concerned curricular office staff members who served as district-level mentors. Each mentor received three hours of training per year through the TPD Office.

School and curricular office leaders expressed that this year after the pandemic was one like no other. One administrator stated, "This year is different because we're trying to help them [teachers] survive and maintain a good work-life-home balance." A curricular office leader shared, "we must attend to [new/beginning teachers'] needs as

people." A second curricular office leader commented that "we prioritize belonging and relationships with and among students, now we need to promote that for staff. How can we incorporate more of these beliefs into our actions?" Since March 2020, four of the six curricular offices that participated in the study continued to host virtual office hours to allow teachers to drop in and have their questions answered. These offices held some of their leadership meetings virtually as well. Curricular office leaders acknowledged the need for targeted professional learning for second and third year teachers as well as a gradual release of information for new and beginning teachers entering the district so that they are not overwhelmed.

Document and Resource Analysis

The researcher reviewed and analyzed 16 documents and web resources, including seven Canvas communities, the district's comprehensive teacher induction program webpage, NEO agendas and feedback, FIA 1 and 2 agendas and feedback, Focus on the Framework modules, instructional mentoring agendas and feedback, and the district's 2019 human resources annual report, that support the professional development components of the district's comprehensive induction program. All documents and resources are designed for use throughout the non-tenured years of new and beginning teachers. Each document or resource was analyzed for connections to components of the state's regulations and Wong's Induction Framework; as well as any components that were not addressed or referenced by the document or resource. The following sections present the analysis of each document and resource reviewed.

Canvas Communities. The district's Office of Teacher and Paraprofessional Development created three Canvas communities as induction program resources, specifically associated with the New Teacher/Educator (NEO) Orientation: The New

Educator (For Teachers), New Educator Orientation (For Teachers), and NEO Planning (For Curricular Office Leaders). The New Educator Canvas community gave new and beginning teachers a snapshot of topics that were important when first entering the district. Topics selected for this Canvas community for new and beginning teachers included:

- My School-Get up to speed on your assigned school, first week events, and some to-do's;
- My Technology-Jump start your learning about Canvas and the digital tools you'll be using;
- My Instruction-Get connected with your curriculum and program area resources;
- My Supports-Find out who can help you;
- My Evaluation-Learn how you will be evaluated; and
- My Growth-Review the professional learning opportunities you will have.

The Canvas community analytics are presented in Figure 6 and show a heightened number of pageviews during August, especially during the week of NEO from August 16 through 20. However, after NEO week, pageviews and engagement with the content were close to, or at, zero. A few days in May had higher-than-average pageviews.

Figure 6

The New Educator Canvas Community Pageviews (May 2021-November 2021)

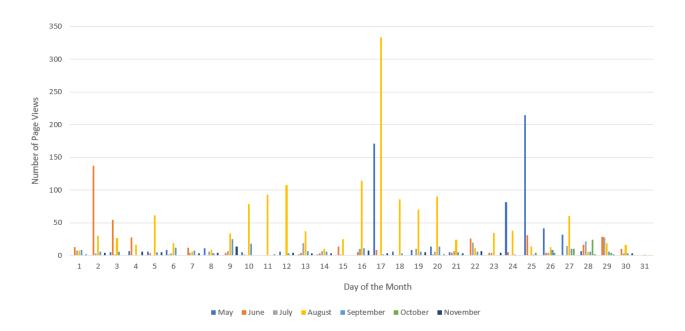
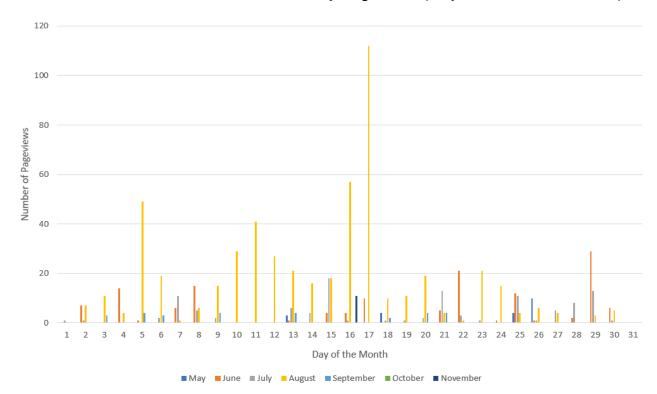


Figure 7 presents an analysis of pageviews to the New Educator Orientation (NEO) Canvas community. This Canvas community was designed for teachers who attended the NEO event prior to the start of the school year. The landing page of the community had links to technical information like technology training, how to join other Canvas communities, and the direct link to the New Educator Orientation Community. An overview of each of the three days was provided along with the registration link, a link to the detailed NEO daily schedule, and a bulleted list of what to expect each day. The quick link buttons were located at both the top and bottom of the page with a description of the resources linked. Analytics for this page yielded a similar trend of high participation and views leading up to the NEO event in August and little activity later.

Figure 7

New Educator Orientation Canvas Community Pageviews (May 2021-November 2021)

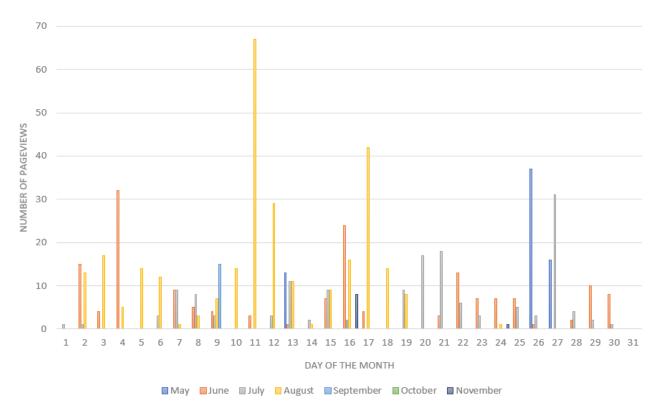


The final Canvas community created and maintained by the Office of Teacher and Paraprofessional Development that was included in the document analysis was the NEO Planning Canvas community for curricular office leaders. This community was designated as the one-stop spot for curricular office leaders as they planned to welcome their new staff members and was updated continuously as soon as the hiring season began. This community included planning to-dos, announcements of NEO updates, reminders about essential paperwork or processes, the complete NEO program, a spreadsheet of new hires that was updated daily, NEO registrants, position vacancy lists, and a program area NEO details spreadsheet, which was an Excel spreadsheet containing the direct link to each curricular office's NEO canvas page and names of office representatives serving as the points of contact for the event.

Figure 8 presents the number of pageviews for this Canvas community from May through November 2021. Similar to the other two Canvas communities, the most daily pageviews were in August. The end of May, beginning of June, and end of July also had increased visitation. Little to no pageviews were observed in September, October, and November.

Figure 8

NEO Planning Canvas Community Pageviews (May 2021-November 2021)



The pageviews of the three Canvas communities indicate that the information contained within each was utilized primarily during the month of August when NEO is held. Resources and information are created to support the professional practice of new/beginning teachers. There is currently no way to collect information concerning reasons for the low pageviews of each Canvas community during the other months of the school year.

Each curricular office was required to have a page in their Canvas community dedicated to housing resources for new staff that are used during NEO and throughout the school year. The researcher obtained permission from four curricular offices to use their Canvas communities as part of this research study. After reviewing each of the four curricular offices' Canvas communities and the pages dedicated to sharing information related to NEO, the researcher noted varied presentation styles and content.

- On the page designed for new/beginning teachers to utilize during NEO, each
 office included their office-specific NEO agenda. Two of the four offices also
 provided outcomes for the entire experience as well as a detailed schedule that
 was hyperlinked to resources for each topic discussed. The other two offices did
 not provide outcomes and instead provided the PowerPoint presentations that
 were used during the NEO experience.
- Two offices provided links to other useful Canvas communities (e.g., the elementary program Canvas community links to the NEO, instructional strategies, county-wide professional learning, and special education communities).
- Two offices assigned homework each night of NEO.
- Two offices had a curricular-specific form to collect feedback at the end of the experience and one office had the general NEO feedback form supplied by the Office of Teacher and Paraprofessional Development.
- One office did not provide contact information for curricular office members.
- One curricular office connected to special education resources.

District's Comprehensive Teacher Induction Program Webpage. Another source that the researcher reviewed was the page on the district's website dedicated to the Comprehensive Teacher Induction Program. This page started with a statement of

commitment to the success of new/beginning teachers and the program goals, which were: creating classrooms where diversity, equity and inclusion are valued; enhancing teacher performance; improving classroom instruction; accelerating student learning; increasing teacher retention rates; and creating collaborative school cultures. Program components, including new teacher orientation, instructional mentoring program, teacher development liaisons, and professional learning sessions, were listed with a brief description and linked to additional web pages with more information. This brief explanation of the district's comprehensive teacher induction program discussed key components of the state's regulations and Wong's recommended components. These components included new teacher orientation before the start of the school year. mentoring and professional learning opportunities, and the names of the two induction staff members who served as the points of contact for the comprehensive teacher induction program. The researcher did not find on this page or any pages linked the key components of administrative support, an explanation of the induction program's evaluation model, observing, co-teaching, networking opportunities, and reduced workloads.

NEO Agendas and Feedback. The research analyzed New Teacher/Educator Orientation (NEO) agendas, resources, and feedback from 2018-19 through 2020-21. The goals of the orientation were found at the top of every planning document and/or resource. These goals were to explore our dedication to our values of diversity, equity and inclusion; establish relationships with leaders in your program area; explore the curriculum, resources and expectations that will lead to your success.

Though orientation was a three-day event, feedback was only collected after the third day with an average response rate of 41% each year. Results from the 2020-21 orientation, which was held entirely virtually, could not be located to include in the study. Feedback findings are presented by item next.

Table 10 NEO Feedback 2018-19 through 2020-21: Respondents who Agreed or Strongly Agreed with Each Item

NEO feedback form item	2018-19 °	2019-20 °	2020-21 °
-	n (%)	n (%)	n (%)
I felt welcomed to the school system throughout NEO.	137 (99.3)	158 (99.4)	184 (98.4)
2. I gained an understanding of the district's vision for diversity, equity, and inclusion.	138 (100.0)	159 (100.0)	184 (98.4)
3. The program area session on Tuesday and Wednesday provided the resources and knowledge I need to prepare me for the first few weeks of the school year.	122 (88.4)	150 (94.3)	178 (95.2)
4. The content of program area sessions were differentiated to meaningfully meet my learning needs.	118 (85.5)	147 (92.4)	173 (92.5)

^a In 2018-19 428 attended NEO, of whom 138 (32.2%) completed the feedback form.

NEO agendas and feedback showcased orientation information, professional learning opportunities, key personnel within the district and induction program, and an explanation of the teacher evaluation model—all of which are components of a highquality induction program. Once again, these resources did not contain information related to administrative support, mentoring, observing, co-teaching, networking opportunities, and reduced workloads.

Framework in Action 1 and 2 Agendas and Feedback. In 2018-19 Framework in Action (FIA) 1 was made mandatory for all first-year new and beginning educators and

In 2019-20 329 attended NEO, of whom 159 (48.3%) completed the feedback form. In 2020-21 434 attended NEO, of whom 187 (43.1%) completed the feedback form.

FIA 2 became mandatory in 2019-20 for second-year educators to the profession. FIA 1 was a three-day program. The first day of FIA 1 took place on the last day of NEO. Both FIA 1 and 2 primarily focused on strengthening new/beginning teachers' knowledge of the Danielson Framework for Teaching, which is used for the district's teacher evaluation model, with additional topics woven into the learning for each day. FIA 1 began with individual teacher intention and goal setting, followed by a deep dive into the domain two components of the Danielson Framework, and concluded with the guiding principles of cultural proficiency and backwards design. FIA 2 began with a reflection on each teacher's personal journey and identity, an exploration of the common themes of the Danielson Framework, and a discussion of cultural perceptions and personal culture and their role in creating a thriving classroom culture. Next, FIA 2 moved into the topics such as the power of high expectations, the Pygmalion Effect, and an exploration of district historical documents. The experience ended with a discussion on the barriers of cultural proficiency and student voice. Feedback was collected at the end of each day to assess participant learning, understanding, and needs. Results from feedback forms are summarized in Table 11.

Table 11FIA 1 Feedback 2018-19 through 2019-20

Of all FIA 1 participants, those who agreed/strongly agreed to the feedback prompt	2018-19ª	2019-20 ⁵
prompt	n (%)	n (%)
1.The Framework in Action Level I program (Days 1 - 3) was a good use of my time as a new teacher in TOPSS	144 (90.6)	140(88.6)
2. I believe my participation in FIA I has made me more effective in my role.	147 (92.5)	141 (89.2)
3. I believe my participation in FIA positively impacted my students.	144 (90.6)	144 (91.1)
4. In comparison to other teacher training I have experienced; I would rate Framework in Action Level I as:		
a. Less effective and engaging than other learning experiences	5 (3.1)	7 (4.4)
 b. As effective and engaging as other 	58 (36.5)	83(52.5)
learning experiences c. Amongst the most effective and engaging learning experiences	96 (60.4)	68 (43.0)

^aIn 2018-19, 178 attended FIA 1, of whom 159 (89.3%) completed the Day 3 feedback form.

In 2019-20, 185 attended FIA 1, of whom 158 (85.4%) completed the Day 3 feedback form.

Table 12 *FIA 2 Feedback 2018-19 through 2019-20*

Of all FIA 2 participants, those who agreed/strongly agreed to the feedback prompt	2018-19ª	2019-20°
	n (%)	n (%)
1. This three-day professional learning experience has influenced the way in which I view my relationships with students, staff, and parents	24 (88.9)	58 (78.4)
2. Rate to which this PL gave you the opportunity to reflect on your professional practice and set specific goals for continued improvement.	26 (96.3)	66 (89.2)
3. Rate to which this PL gave you the opportunity to strengthen commitment to equity and relationships across differences.	26 (96.3)	68 (91.2)
4. Rate to which this PL gave you the opportunity to feel valued as a member of the community and its commitment to learning and leading with equity.	25 (92.6)	65 (87.8)

In 2018-19, 68 attended FIA 2, of whom 24 (35.2%) completed the Day 3 feedback form.

Focus on the Framework. Focus on the Framework modules were created by the Office of Teacher and Paraprofessional Development and facilitated by the teacher development liaison (TDL) in each school building. Modules were created to address key concerns for new and beginning teachers. The purpose of this series of face-to-face professional learning modules was to provide relevant and engaging learning experiences in which participants discussed how to build collegial relationships, reflected on and committed to continuous improvement, and highlighted growth through evidence. Based on these documents, all sessions were aligned to the Danielson Framework, had outcomes and questions to drive the learning, and were easily accessible to TDLs. Each session focused on two to four of the Danielson Framework

In 2019-20, 150 attended FIA 2, of whom 74 (49.3%) completed the Day 3 feedback form.

components and TDLs were required to report how many modules they facilitated each year; they were not required to report the module names or the number of new/beginning teachers who participated.

 Table 13

 Focus on the Framework Modules Completed in District Schools

Modules completed	SY2018	SY2019	SY2020
	n (%)	n (%)	n (%)
Zero modules	5 (8.8)	1 (1.9)	19 (43.2)
One to three modules	29 (53.7)	24 (44.4)	9 (20.4)
Four to five modules	14 (25.9)	8 (14.8)	8 (18.2)
Six or more modules	6 (11.1)	2 (3.7)	8 (18.2)
Total number of schools reporting (% Schools)	54 (70.1)	54 (70.1)	44 (57.1)

Instructional Mentoring Agendas and Feedback. The instructional mentoring component of the induction program provides district office and school-based staff to serve as mentors to teachers who were new to the profession during their first year in the district. Mentors utilized the Danielson Framework to support the professional growth of their mentees in the span of two mandatory, non-evaluative observation cycles. Each observation cycle involved a pre-observation conference, non-evaluative observation, and post-observation conference to mimic the process that new teachers would encounter in their four evaluative observations with their administrators. In

addition to the two observation cycles, instructional mentors must provide two additional supports, such as co-planning, co-teaching, data talks, or other supports that help the new teacher be more successful in their teaching practice.

Instructional mentors used to meet three times per year to engage in professional learning; however, that number had decreased to two meetings during the 2019-20 school year. Meetings were focused around specific topics and outcomes designed to promote mentor reflection on their own practice when working with, or observing, new and beginning teachers facilitating instruction in their classroom. During the pandemic, the instructional mentoring program shifted its focus to mentoring in a virtual world. Professional developments for mentors then included learning about how to navigate virtual observations and the sharing of ideas around best practices in virtual mentoring.

2019 Human Resource Annual Report. The district's 2019 human resource annual report communicated the recruitment, hiring, and separation from the district between October 2018 through October 2019. Reasons for separation included resignation, retirement, death, termination, or unknown; reasons for separation were not always provided during exit interviews or separation paperwork. The district's instructional staff make up approximately 55.4% of the total staff population. At the end of the 2018-19 school year, instructional staff made up 53.6% of those who resigned from the district. Of that 53.6% who resigned, 42.6% were White, 6.6% African American or Black, 2.1% Hispanic/Latino, 1.6% Asian, 0.6% two or more races, and 0.2% were American Indian/Alaska Native. The report stated that 43.0% of those who left were elementary teachers, 27.2% were middle school teachers, and 23.0% were high school teachers. Table 14 illustrates the number of teachers who resigned between 2006-07 and 2018-19 within their first five years of teaching in the district. The average percentage of teachers leaving after their first year of teaching was 1.3%, and 6.5% left after Year 2, followed by 4.5% after Year 3, 4.0% after Year 4, and 3.7% after Year 5.

Table 14

Cumulative Numbers and Percent of Teacher Resignations Across the First Five

Years of Teaching in the District

Year	Hired		Year of resignation						Resig	nations			
		Ye	ar 1	Υe	ear 2	Ye	ar 3	Ye	ar 4	Ye	ar 5		
	N	n	%	n	%	n	%	n	%	n	%	n	%
2006-07	573	3	0.5	48	8.4	27	4.7	20	3.5	9	1.6	107	18.7
2007-08	409	1	0.2	22	5.4	16	3.9	13	3.2	11	2.7	63	15.4
2008-09	247	1	0.4	19	7.7	11	4.5	19	7.7	3	1.2	53	21.5
2009-10	289	1	0.3	13	4.5	2	0.7	8	2.8	17	5.9	41	14.2
2010-11	279	1	0.4	9	3.2	21	7.5	12	4.3	15	5.4	58	20.8
2011-12	331	2	0.6	17	5.1	16	4.8	14	4.2	10	3.0	59	17.8
2012-13	356	1	0.3	20	5.6	17	4.8	16	4.5	14	3.9	68	19.1
2013-14	355	2	0.6	31	8.7	10	2.8	15	4.2	21	5.9	79	22.3
2014-15	442	6	1.4	8	1.8	27	6.1	13	2.9	16	3.6	70	15.8
2015-16	257	25	9.7	16	6.2	9	3.5	8	3.1				
2016-17	388	1	0.3	30	7.7	25	6.4						
2017-18	401	6	1.5	53	13.2								
2018-19	391	3	8.0										
Average	363	4	1.3	24	6.5	16	4.5	14	4.0	13	3.7	66	18.4

Note. Adapted from the district's 2019 human resources annual report.

Conclusions

Education is a challenging career that not only requires individual skill, but also collaboration and a mindset of continuous growth. High-quality professional learning opportunities, such as the comprehensive teacher induction program, are essential experiences for new and beginning teachers to learn and grow alongside other educators. With the information collected from this study, the researcher gained a better understanding of the purpose of the district's induction program, its structure and components, as well as key stakeholder perceptions of the induction program. The three research questions guided the researcher in assessing the district's current state

of its comprehensive teacher induction program as well as identifying modifications to the program that could improve teacher retention and new and beginning teacher preparation.

The following section details the intent of each research question, conclusions drawn from the data analysis, and the extent to which these findings supported the theory of action.

Research Question 1

The first question guiding this study was: What components of high-quality induction programs are new and beginning teachers experiencing in the district's current comprehensive teacher induction program?

Answering this first question facilitated an understanding of (a) the components stakeholders believed were included in the induction program, (b) the components new and beginning teachers experienced, and (c) the components implemented by district and school leaders. Incidentally, the researcher better understood each stakeholder's role and contribution to the district's induction program.

Conclusion 1. New and beginning teachers engaged in a variety of professional development sessions as part of the district's induction program. Induction components that new and beginning teachers were invited to participate in varied based on the time of year a new/beginning teacher was hired by the district and how many years of experience they had in the profession. These teachers were categorized into three groups:

Group 1 included teachers who were new to the teaching profession and who
had attended New Teacher/Educator Orientation (NEO). Results from interviews
of new teachers who were hired prior to NEO indicated that these teachers had a
wide variety of professional learning experiences offered to them during their first
year in the district. New teachers reported attending NEO, receiving a district-

provided mentor who met with them at least four times during their first year, attending monthly after-school professional learning experiences with their teacher development liaison (TDL), attending system-wide professional learning opportunities, receiving support from their administrators, and having many conversations about their professional practice with administrators and colleagues.

- Group 2 included beginning teachers, or those new to the district who had prior teaching experience, who were hired before and were able to attend NEO. Teachers in this group shared that they were offered the following supports during their first year in the district: NEO, monthly after-school professional learning experiences with their TDL, and system-wide professional learning opportunities. These teachers shared that their school-based administrative team did not provide much support during their non-tenured year(s), other than completing the required four observations each year, engaging in a goal-setting conference at the beginning of the year, and holding a final evaluation conference at the end of the year.
- Group 3 included new and beginning teachers hired after NEO. Teachers who were unable to attend NEO because they were hired after the start of the school year are given the opportunity to attend the event the following year, after completing their first year of teaching in the district. When they were hired, the resources from the summer's NEO event were shared with them and they were encouraged to review the resources on their own. These teachers reported not knowing where to find essential information and from whom to request assistance when they had questions or concerns. The majority of the help they received was from colleagues in classrooms nearby and from content team members. New teachers hired after the start of the school year were assigned

district-provided mentors; however, they shared that it was at least two months before their mentor was assigned and made contact. Teachers in this group attended monthly after-school professional learning experiences with their TDL, attended system-wide professional learning opportunities, and received varying levels of support from their administrators.

Conclusion 2. The experiences that school and curricular office leaders reported that they offered were not aligned with what teachers claimed they had received.

This study included eight new/beginning teachers who worked in schools with school leaders who also participated in the study. When comparing survey responses by staff role (teacher compared to administrator), the researcher observed that, except for year one, teacher participation in program components was rated far below that given by administrators for the majority of components. Based on both teacher and administrator responses, the participation in (for teachers) and offering of (for administrators) supports aligned with high-quality induction components drastically dropped from year one to year two, and dropped again in year three. Interviews with teachers corroborated the survey results of decreasing types of supports offered and administrators acknowledged little differentiation of supports for second and third year teachers.

Table 15

Percent of New/Beginning Teachers Reporting Participation in Induction Components and

Percent of School and Curricular Leaders Reporting Offering the Induction Components

Inc	duction component	Yea	ar 1	Yea	ar 2	Yea	ar 3	experi	ot enced offered
		Т	Α	Т	Α	Т	Α	Т	Α
	New Teacher/Educator Orientation (before the start of the school year)	79.1%	65.1%	9.0%	16.3%	0.0%	14%	11.9%	4.6%
2.	County provided mentor	56.3%	56.1%	9.9%	22.0%	2.8%	14.6%	31%	7.3%
3.	System-wide scaffolded professional development	46.7%	40.9%	32.5%	31.8%	16.7%	25.8%	4.2%	1.5%
4.	Administrative support	42.0%	32.5%	26.8%	32.5%	19.6%	31.1%	11.6%	3.9%
5.	Visits to, observation of exemplary/experienced teacher's classrooms	23.5%	36.2%	13.2%	30.4%	5.9%	27.6%	57.4%	5.8%
6.	Networking opportunities	28.3%	39.4%	22.8%	30.3%	16.3%	28.8%	32.6%	1.5%
7.	Professional development to address new teacher needs/concerns	46.5%	44.4%	20.9%	30.2%	8.1%	23.8%	24.4%	1.6%
8.	Ongoing formative review/follow-up discussions on new teacher performance	41.8%	36.5%	27.3%	33.7%	17.3%	28.4%	13.6%	1.4%
9.	Reduced workload	8.5%	24.1%	5.1%	6.9%	0.0%	3.5%	86.4%	65.5%
10	. Induction evaluation model	44.1%	38.6%	29.4%	31.4%	23.5%	30.0%	3.0%	0.0%

Note. T = teacher responses; A = administrator responses.

The researcher was able to identify the components of a high quality induction program experienced by new and beginning teachers. Although a variety of induction components are provided, not all new and beginning teachers engage in all components

during their induction experience. All new/beginning teachers engaged in professional learning with their TDL and with their curricular office and content colleagues. Not all new/beginning teachers experienced NEO, mentoring, strong administrator support, opportunities to visit exemplary teacher classrooms, or networking opportunities. The differences in induction experiences hinged on the previous classroom experience of a teacher and their hiring date.

Research Question 2

The second question that guided this study was: What are the ways in which new and beginning teachers' induction experiences reflect the state's regulations and Wong's high-quality Induction Framework?

The state's regulations comprise the official administrative regulations issued by the state. Regulations specific to the State Department of Education fall under Title 13A and outline the requirements for each district's comprehensive teacher induction program. These regulations express the need for coherence in structure; consistency in focus to ensure an integrated, seamless system of support; and flexibility for local school systems to build and organize the components of their induction program to meet the needs of their new teacher workforce.

In his 2004 study, Wong described the key activities within successful, comprehensive induction programs that have been found to be beneficial to new teachers during their first few years in the profession. Many of the components that Wong shared, such as an orientation, ongoing professional development, and mentoring are also included in the state's regulations requirements. The second research question guided the researcher in identifying the components of high-quality induction programs, according to the state's regulations and Wong's research, that were reflected in the induction experiences of this district's new and beginning teachers.

Conclusion 3. The district adhered to all of the required components of an induction program outlined in the state's regulations and some aspects of the components from Wong's research.

Section 13a.07.01.04 of the state's regulations describes the general requirements for all induction programs for the state's public school systems. The state's regulations mandate an orientation for all new teachers before the start of the school year and the district held a three-day orientation the week before all teachers started their school year. The district offered all teachers new to the profession a district mentor for their first year to accommodate the state's requirement for ongoing support from a mentor. Note that the state's regulations state that mentoring and all other supports should be provided to "teachers during their comprehensive induction period" (state's regulations Sec. 13a.07.01.06, 2021); it is apparent from this study that the district provides mentoring to new teachers for one year of their three-year induction period. The district provided ongoing professional development to new/beginning teachers throughout the school year through its Framework in Action program, monthly school-based TDL-facilitated after-school sessions, and content specific professional learning opportunities. Non-tenured teachers were required to be observed four times per year to get feedback on their professional practice, which included a preobservation conference, the observation, and a post-observation conference. Twenty percent of new/beginning teachers acknowledged that pre-observation and postobservation conferences did not always occur for each observation during their nontenured term in the district. Co-teaching with and the observation of master teachers was afforded to all new teachers through their district-provided mentor; however, not all beginning teachers were provided mentors. Leaders from two curricular offices who participated in focus groups shared that they arranged for all new and beginning teachers to receive a substitute day to take advantage of the opportunity to observe

experienced teachers outside of their school building. Per the state's requirement for each district to designate staff to organize induction activities, the Office of Teacher and Paraprofessional Development was designated as the organizer and evaluator of the district's comprehensive induction program.

All components required by the state are incorporated into the district's comprehensive induction program as are portions of components recommended by Wong. The district began its comprehensive induction program with a highly-structured three-day orientation, with back-to-back presentations, learning, and activities that according to new/beginning teachers was "overwhelming". System-wide professional learning opportunities like FIA 1 and 2 were available to first- and second-year new/beginning teachers. These opportunities offered separate sessions for new teachers and beginning teachers. Only one option was available for each group and attendance was mandatory. No system-wide professional learning had been created for third-year teachers in their final year of non-tenured status. The FIA 1 and 2 professional learning sessions also served as networking opportunities for new/beginning teachers to meet and learn from other new/beginning teachers within the district. These mandatory opportunities were created and implemented by the Office of Teacher and Paraprofessional Development to model effective teaching and pedagogical best practices. Table 16 summarizes the current components of the district's comprehensive induction program as compared to state requirements and Wong's Induction Framework.

Table 16

Wong's Induction Framework Components, State Induction Requirements, and

DCPSS Comprehensive Induction Program Components

Wong's Elements of a Comprehensive Induction Program	Present in district	State requirements	Present in district
Start the year off with an initial four or five-day orientation	√ Two or three or four -day	An orientation program	1
Provide an assigned full-time mentor		Ongoing support from a mentor	√ Mentors have other full-time responsibilities
Offer a variety of scaffolded system-wide professional development	√ Offerings are limited and mandatory	Ongoing professional development designed to address new teacher needs and concerns	√
Incorporate a strong sense of administrative support	,	Ongoing formative review/follow-up discussions on new teacher performance	√ Follow-up conversations are inconsistent throughout the county
Encourage and provide the opportunity, time, and means for new teachers to visit the classrooms of exemplary teachers		Observation and coteaching opportunities	√ Co-teaching is offered inconsistently throughout the county
Provide networking opportunities for new teachers to build support, commitment, and leadership in the learning community	√ At county professional developments	Reduced workload for new teachers and mentors, to the extent practical, given fiscal and staffing concerns	
Model effective teaching during professional development and mentoring	\checkmark	Induction program staff	√
as to soprior and montoning		An evaluation model (for comprehensive induction program)	٧

Analyses of new/beginning teacher interviews, focus group discussions, and the relevant documents and resources provided an assessment of the components from the state's regulations and Wong's Induction Framework that were present in the district's induction program. Research findings also provided insight into stakeholders' understanding of the district's current induction program.

Research Question 3

The third question that guided this study was: Where do gaps exist between the current induction practices for new and beginning teachers in the district and the state's regulations and Wong's components of high quality induction programs?

The researcher used the findings based on research question three to identify the components of high-quality induction programs that were missing from the district's current induction program in order to make recommendations that would enhance the induction program experience for all stakeholders.

Conclusion 4. The district adhered to all of the required components of an induction program stated in the state's regulations, but could increase the quality of their program by adding additional components identified by Wong's research and making all supports systemic.

One component in the state's regulations (2021) that is not systemic in the district's program is the "reduction in the teaching schedule; or a reduction in, or elimination of, responsibilities for involvement in non-instructional activities other than induction support" (Sec. 13a.07.01.05) of new teachers. The state's regulations stipulate that this practice is to be included in induction programs to the "extent practicable given staffing and fiscal concerns" (Sec. 13a.07.01.05). Although not implemented systemically, during focus group discussions, three administrators stated that new teachers within their school buildings received teaching schedules that consisted of one content and one academic level (for example, five sections of on-grade level Biology). This practice could be used across all schools in the district to lower the amount of lesson planning time of new/beginning teachers and give them a chance to acclimate to their new school community and job requirements and responsibilities.

The missing components of a high-quality induction program described by Wong were a four- or five-day orientation, full-time mentors, a strong sense of administrator support, and the opportunity, time, and means for new teachers to visit the classrooms of exemplary teachers. Although the district incorporates all but two of Wong's components, the components are not implemented as described by Wong and therefore are considered missing components. For example, Wong suggests a four to five-day orientation, the district offers a two to three-day orientation. Wong suggests full-time mentors for new and beginning teachers throughout their non-tenured years. The district only offers new teachers mentors for one year and these mentors are district or teacher leaders who have other full-time responsibilities. A few district offices have the ability to offer new and beginning teachers the opportunity to observe master teachers while other district offices offer monthly training specific to new and beginning teachers. And from focus group discussions, there seems to be some missing components offered by a couple of school leaders but are not present throughout the entire district.

All of the teachers who attended the district's NEO before the start of the school year and participated in this study described the experience as "overwhelming." Two days were devoted to introducing new/beginning teachers to the district's vision, system leaders, the learning management system and other available technology resources, curricular resources, and special education basics. The final day of orientation was reserved for the first day of Framework in Action, a three-day program focused on familiarizing new/beginning teachers with the Danielson Framework and evaluation system. Using the last day of orientation for the first day of Framework in Action lessened the number of days that new/beginning teachers were out of their buildings during the school year as well as the number of substitute teachers needed for this mandatory learning experience; however, the practice also lessened the amount of time

new/beginning teachers had before the start of the school year to interact with system leaders, school leaders, and experienced colleagues and caused the learning experiences in the first two days to be condensed and rushed.

All of the new teachers who received a district-provided mentor and all of the beginning teachers who participated in this study stated that it would have been beneficial to have a mentor throughout the entirety of their non-tenured term. New teachers stated that they struggled during their second year without this support and beginning teachers acknowledged that it would have been helpful to have a mentor who knew the district's "way of doing things" and could explain that to them. Those who received a district-provided mentor or an in-school mentor shared that the experience helped their professional practice and emotional health.

Approximately 40% of new/beginning teachers interviewed stated that the administrator team at their school was supportive, regularly visited their classroom, and provided them with concrete feedback to improve their professional practice. These teachers believed that their administrators took an interest in them and their success and knew them as people and not just teachers. The remaining 60% of new/beginning teachers described few interactions with their administrators outside of goal-setting conferences, observations, and end-of-year conferences. When asked what administrator support looked like for them, one new teacher was overcome with emotion as they described the negative interactions with their principal.

The final component that should be a systemic part of the district's induction program is the opportunity, time, and means for new teachers to visit the classrooms of exemplary teachers. Elementary teachers who had the opportunity to work with reading or math support teachers within their buildings said that they benefited from the opportunity to watch these master teachers teach and demonstrate the successful implementation of unfamiliar best practices and teaching strategies. The time with the

support teacher to debrief and discuss what was observed helped new teachers better understand the purpose of the strategies and ways that they could modify the strategies to better meet their teaching styles.

In response to research question three, new/beginning teachers and school and curricular office leaders identified gaps within the current induction program. As a result of the interviews and focus groups, new/beginning teachers and school and curricular office leaders helped the researcher to identify experiences, opportunities, and supports that stakeholders felt would improve the induction program, support teacher retention, and better meet the pedagogical needs of new and beginning teachers.

Limitations of Study

Although the district has hired over 1,000 new/beginning teachers over the last four years, approximately 800 of whom are still currently teaching within the district, only 67 new/beginning teachers chose to participate in the study. The COVID-19 pandemic and the transition between in-person, virtual, and hybrid teaching and learning may have impacted participation in the study as evidenced by the 15 teachers who indicated in their survey results that they would like to participate in the individual interviews, but ultimately were unable to find the time to do so. The sampling of both teacher and administrator participants yielded a representation of experiences from across the district. Twelve new teachers and eight beginning teachers new to the district participated in both the survey and interview portions of this study. Seven of these 12 participants taught at the elementary level, five at the middle school level, six at the high school level, one at one of the three education centers, and one participant was split between a middle school and one of the district's education centers. The district was organized into three geographical areas. In this study, five teachers taught at schools located in Area 1, nine in Area 2, and six in Area 3. Administrator participants in this study led six elementary schools, seven middle schools, seven high schools, and one education center. Leaders of six schools were located in Area 1, eight in Area 2, and six

in Area 3. Despite the relatively small sample size, participants were representative of this district's geographic areas and school levels.

One limitation of the study was the lack of diverse perspectives among both the new/beginning teacher participants and focus group participants. Of the 20 teachers who participated in both the survey and interview, 90% of them identified as female. The two male participants both taught at the secondary level and had teaching experience prior to gaining employment with the district. No new male teachers or elementary male teachers were included in this study. There were also only two new/beginning teacher participants hired after NEO and because the district did not have a process by which the researcher could contact former employees, the researcher was only able to interview new/beginning teachers still currently working within the district. Of the 34 focus group participants, 24 were school leaders, five were members of the Office of Special Education, and five were curricular office leaders, only one of which supervised solely secondary education. Participation from representatives of these missing groups would have given the researcher a better understanding of the structure and components of the district's current induction program.

A second limitation was the subjective interpretation of high-quality induction program components. A few administrators indicated that new teachers in their buildings were given a reduced workload; however, all new/beginning teachers interviewed reported that they had a full workload of five classes during their non-tenured term in the district. Interview responses revealed that a reduced workload to those administrators meant purposefully assigning new teachers to their own dedicated classroom for all five teaching periods and teaching all courses of the same content and level.

Reflections and Future Investigations

Research performed by both the U.S. Department of Education and Hong around new teachers' feelings of unpreparedness for classroom realities can be used as evidence for further research addressing the need for high-quality induction programs. If new teachers feel that they are lacking essential skills needed to perform well due to the experiences offered, or not offered, by their teacher preparation program, their induction program will look very different from those who are grappling with the mismatch between their perception of being a teacher and the demanding realities of being a teacher. With numerous components included in a high-quality induction program, implementing the program could take a large amount of work on the front end. This could include surveying new teacher candidates during the onboarding process, and throughout their non-tenured years, to identify areas of need. The survey results could lead to additional information gathering efforts from pre-service teachers to gain insight into their time as a student teacher and what could be added to enhance their experience. Systems could even take time to look at trends in hiring data to identify general locations of where candidates come from and use that data to investigate the teacher preparation program structures of schools in those areas to identify potential gaps in knowledge or skill. All data could then be used to create learning experiences tailored to the needs of new teachers. With the influx of large numbers of teachers each year, from outside of the state and sometimes the country, this is a massive task but could result in huge gains related to learning about teacher job satisfaction and feelings of support in Dhandy County Public Schools.

Impact for School District

When considering the impacts of this research on the Dhandy County Public School System, it is necessary to refer back to the proposed theory of action. The theory of action stated in Section I that guided this research study was that **if** the researcher can identify the gaps in the current teacher induction program, **then** the

researcher can design a more effective induction program that better meets the pedagogical needs of new and beginning teachers **and** provides the essential supports, guidance, and tools for improving professional practice. The data collected from this research study has helped to establish a clearer picture of the current state of the comprehensive induction program in DCPSS. Members of the Office of Teacher and Paraprofessional Development have expressed interest in meeting to discuss the findings of this study and begin making modifications to the district's comprehensive teacher induction program. Collaborating with this office, should help to reach the aim of this study, to have an established high-quality comprehension induction program in DCPSS by the end of the 2024-25 school year.

To create a high-quality induction program that includes all of the components required by the state's regulations and Wong's research, it will be important to focus on two components that interviewed new/beginning teachers spoke about most frequently, which were mentoring and administrator support. The following considerations could help to begin improving the induction program to better meet the needs of new and beginning teachers.

Administrator Accountability in Establishing and Maintaining a High-Quality, In-School Induction Program

The work of school leaders is guided by the research-based Professional Standards for Educational Leaders (PSEL). These standards are organized around the domain, qualities, and values of leadership work that have been identified as contributors to students' academic success and well-being. Standard 6, professional capacity of school personnel, states that "effective educational leaders develop the professional capacity and practice of school personnel to promote each student's academic success and well-being" (National Policy Board for Educational

Administrators, 2015, p. 14). The nine elements associated with this standard help to define the work of effective educational leaders and elaborate on the work necessary to meet the standard. The elements are:

- Recruit, hire, support, develop, and retain effective and caring teachers and other professional staff and form them into an educationally effective faculty.
- b. Plan for and manage staff turnover and succession, providing opportunities for effective induction and mentoring of new personnel.
- c. Develop teachers' and staff members' professional knowledge, skills, and practice through differentiated opportunities for learning and growth, guided by understanding of professional and adult learning and development.
- d. Foster continuous improvement of individual and collective instructional capacity to achieve outcomes envisioned for each student.
- e. Deliver actionable feedback about instruction and other professional practice through valid, research-anchored systems of supervision and evaluation to support the development of teachers' and staff members' knowledge, skills, and practice.
- f. Empower and motivate teachers and staff to the highest levels of professional practice and to continuous learning and improvement.
- g. Develop the capacity, opportunities, and support for teacher leadership and leadership from other members of the school community.
- h. Promote the personal and professional health, well-being, and work-life balance of faculty and staff.
- i. Tend to their own learning and effectiveness through reflection, study, and improvement, maintaining a healthy work-life balance.

In his 2004 article, Wong states "effective administrators [must have] have a new teacher induction program available for all newly hired teachers, which then seamlessly becomes part of the lifelong, sustained professional development program for the district or school" (pg. 41). Because administrators are responsible for ensuring the success and achievement of their students, they must serve as instructional leaders and provide guidance and support, to all staff and especially to new teachers within their building. Effective leaders have knowledge of trends in new teacher needs, the skill to identify the specific needs of their new teacher population, and the capacity to organize and implement actions to meet those needs.

In this study, new/beginning teachers described their administrators as being either extremely supportive, whereby teachers interacted with them regularly and felt that they knew them as human beings and not just a teacher; or unsupportive, unwelcoming, and only seen for formal observations. In focus groups, administrators readily shared that they relied heavily on teacher leaders within their building to welcome new/beginning teachers into the school community, provide professional learning, and assist in monitoring the improvement in their professional practice. According to PSEL Standard 6, as effective leaders responsible for growing the professional capacity and practice of school personnel, administrators should be held accountable for establishing an in-school induction program for which they know, report, and have a deep understanding of the induction activities being offered to new/beginning teachers, the impact of the induction activities, and ensuring that the activities are aligned to and in support of the established goals of the district's comprehensive teacher induction program and the Superintendent's Strategic Call to Action. Induction program structures should be established within schools to grow teacher leader mentoring skills, regularly assess the quality of the mentor-mentee

relationships, monitor the impact of after school TDL professional learning sessions, and enable new/beginning teachers to visit, observe and collaborate with their colleagues. An evaluation system should be used to help administrators closely monitor the overall success of the induction program and identify areas for improvement.

Build Communication Structures Among All Stakeholders

The district's Office of Teacher and Paraprofessional Development (TPD) was charged with the task of creating and implementing the district's comprehensive teacher induction program. With five TPD staff members and over 300 new/beginning teachers hired each year, it was necessary for the TPD office to include other district staff members to provide a variety of supports to meet the needs of new and beginning teachers. School system leaders, including district offices, school administrators, teacher leaders, and retired teachers were included in the TPD Office's plan as support providers in the district's comprehensive teacher induction program. With a large number of individuals and offices involved, and multiple program components such as New Teacher/Educator Orientation (NEO), instructional mentoring, teacher development liaisons, and professional learning sessions, it is imperative that everyone has a common understanding of, and vision for, the induction program. It is crucial that everyone's actions, and offerings, align with the program goals of welcoming, supporting, and developing new teachers to create classrooms where diversity, equity, and inclusion are valued, enhance teacher performance, improve classroom instruction, accelerate student learning, increase teacher retention rates, and create collaborative school cultures.

Data indicated that 44% of administrator focus group survey respondents, all at the secondary level, were not aware that they were expected to contribute to the

district's comprehensive teacher induction program. The Office of Teacher and Paraprofessional Development (TPD) should consider creating a living document that outlines what supports must be offered to new/beginning teachers each year; who is responsible for providing the supports; and the resources, both personnel and material, that are available and how to access them. The living document should include essential information such as useful Canvas communities, specific roles and responsibilities for each stakeholder group, and accompanying accountability measures for each stakeholder group. This document along with accountability measures will assist administrators in creating and maintaining their in-school induction program and help to ensure alignment between the district and school programs.

Along with the living document, the TPD Office should consider organizing a small team of representatives from each stakeholder group that meets yearly to analyze all program evaluation data to ensure that the professional learning experiences are aligned with state regulations, meet the needs of all new/beginning teachers, as well as address the district's goals for the comprehensive teacher induction program. Exit interview data, which should include reasons for leaving the district as well as questions pertaining to the induction program, should also be analyzed to gain a deeper understanding of program effectiveness and assist with identifying necessary improvements to the induction program. The TPD office should be allotted time at principal and assistant principal meetings, at least twice per year, to cultivate a shared vision and responsibility for the success of all new/beginning teachers and facilitate conversations that allow administrators to share best practices and gather ideas from their colleagues.

Restructure the Mentoring Program

New teachers described their mentoring experience as either very beneficial with lasting relationships; or not helpful, felt "forced," and "like a job that had to be checked

off of a list of requirements;" beginning teachers shared that it would have been helpful to have a mentor who knew the district's "way of doing things;" and research indicates that mentoring is a one of the most influential components of a high-quality induction program. In fact, mentorship opportunities are known to be beneficial to all teachers at every stage in their career. All schools should be responsible for providing mentors to all new and beginning teachers. In-school mentors are more easily accessible than nonschool-based mentors, know the school culture and student population, and can observe and be observed by new/beginning teachers during planning periods. Schools should create teacher mentor cohorts that rotate every three years so that they can provide mentorship to new and beginning teachers for the entire length of the nontenured status. The TPD office and curricular offices should join forces to provide training for these in-school mentors. The professional learning provided by members of the TPD Office should focus on building relationships and mentoring skills as well as conversations that guide mentors in reflecting on and analyzing their own mentoring practice. Curricular offices should work with mentors to develop a common understanding of what good teaching looks like in each content area. Teachers should be familiarized with curricular classroom walkthrough tools, exemplary practices documents, and other curricular-specific resources that should be utilized in their work with new and beginning teachers.

Summary

The purpose of this qualitative study was to investigate the gaps within the current comprehensive teacher induction program of DCPSS in comparison to the induction program components within the state's regulations and Wong's Induction Framework. The study evaluated the components of the district's comprehensive teacher induction program through surveys, interviews, focus groups, and document

analyses. The intent of the study, to determine a current state related to the district's comprehensive teacher induction program as well as make recommendations for how to improve the experience and professional capital of new and beginning teachers, was accomplished. Recognizing that the district's induction program is not the only reason for teacher attrition, the current findings suggest that it could be a contributing factor.

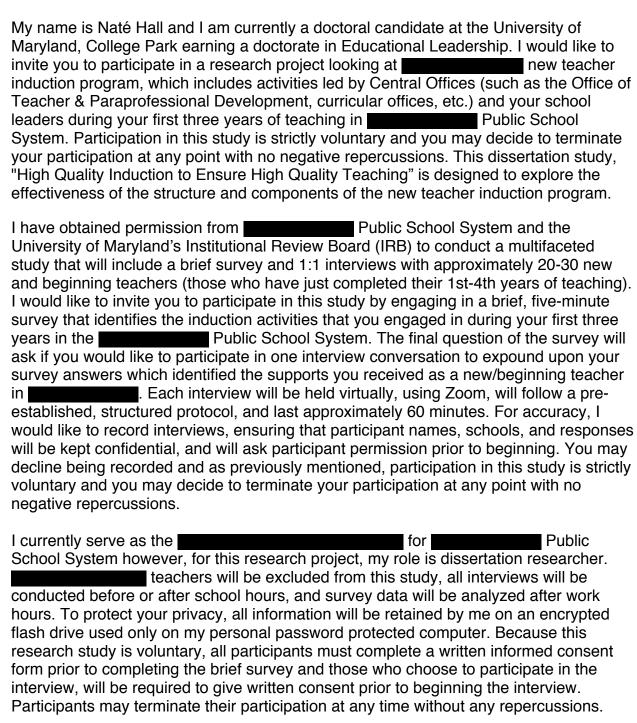
The pandemic has tremendously impacted our students, teachers, school leaders, district office staff, school communities, and educational system as a whole. Currently, school systems across the nation are suffering from teacher shortages which have contributed to teachers having less planning time due to the need for them to cover classes. This additional stressor on teachers causes strain on their mental health as well as their work-life balance. For these reasons (Rosenberg & Anderson, 2021) and others, teachers are leaving each month and many are actively seeking new job opportunities outside of the education profession. It is imperative, now more than ever, that the district simultaneously find ways to both retain the teachers that it has while enhancing its induction program to build new and beginning teacher capacity and effectiveness.

Appendix A

Email to New & Beginning Teachers (Research Study Participation)

Insert Date

Dear	Teacher	•



Summarized results from the survey and interviews may be presented at professional conferences or published in professional journals. Direct quotes from participants will *not* be included. The results of the study may help inform the district about additions or modifications to their New Teacher Induction program that could increase teacher retention and prepare new teachers for a long career in education. Please keep this email for your records, and feel free to contact me with questions or comments via email at nhall923@umd.edu. Please click here, to participate in the brief, five-minute survey. Your assistance is greatly appreciated!

Respectfully,

Naté L. Hall, Doctoral Candidate Doctorate in Education, UMD College Park

Appendix B

Teacher Confirmation for 1:1 Interview

In	2	ρ	rt	\Box)a	tρ

Dear Teacher:

Thank you so much for your willingness to participate in this dissertation study, "High Quality Induction to Ensure High Quality Teaching." Your perspective as a new/beginning teacher will be an invaluable asset to this study. This study is designed to explore the effectiveness of the structure and components of the new teacher induction program and solicit your specific and unique ideas and experience. Please remember that participation in this study is strictly voluntary and you may decide to stop participating at any point with no negative repercussions.

As mentioned in the previous email, you will be engaging in one interview conversation around the supports you identified receiving as a new/beginning teacher in Each interview will be held virtually, using Zoom, follow a pre-established, structured protocol, and will last approximately 60 minutes. For accuracy, I would like to record interviews, ensuring that participant names, schools, and responses will be kept confidential, and will ask permission prior to beginning. You may say no to being recorded. I will also ask for your written consent to participate in the study prior to beginning the interview. All information will be retained by me on an encrypted flash drive used only on my personal password protected computer. You may terminate your participation at any time with no negative repercussions.

Survey results may be presented at professional conferences or published in professional journals. Direct quotes from participants will *not* be included. The results of the study may help inform the district about additions or modifications to their New Teacher Induction program that could increase teacher retention and prepare new teachers for a long career in education.

Your time and assistance is greatly appreciated! Please find the details of your interview below.

Interview #	
Date and Time	
Zoom Information	

Please keep this email for your records, and feel free to contact me with questions or comments via email at nhall923@umd.edu.

Respectfully,

Naté Hall, Doctoral Candidate Doctorate in Education, UMD College Park

Appendix C

Qualtrics Consent Form for New/Beginning Teachers (Survey)

Welcome to the "High Quality Induction to Ensure High Quality Teaching" research study!

I am interested in gaining a deeper understanding of the effectiveness of the structure and individual components of Howard County Public School System's New Teacher Induction Program. This study consists of two parts - a survey and 1:1 interview - to gather teacher perspectives on professional learning opportunities that you might have engaged in during your first three years in HCPSS. You may choose to engage in one part or both. Your participation in this study is strictly voluntary and you may decide to stop participating at any point with no negative repercussions. Your responses are anonymous and will be kept completely confidential.

The survey should take you around 5 minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study. The principal Investigator of this study, Naté Hall, can be contacted at nhall923@umd.edu if you have any questions.

	This research is being conducted by Naté Hall at the University of Maryland, College Park. It is directed by Dr. David Imig, advisor. The
	purpose of the survey is to gather background information for which survey
Purpose of	questions will build on. The purpose of individual interviews is to gain
Study	insight into a teacher's experience engaging in Howard County's
'	Comprehensive New Teacher Induction program. The results of this
	research may inform the system's Comprehensive New Teacher Induction
	program.
	First, you are being asked to participate in a survey. The survey will take
	approximately five minutes to complete and consists of five questions –
	three introductory questions and two questions about your new teacher
	induction program experience.
Procedures	
	The final question of the survey will ask if you would like to participate in
	one (approximately 60-minute, virtual) interview conversation to expound
	upon your survey answers which identified the supports you received as a
	new/beginning teacher in Howard County.
Potential Risks	There are no known risks to participants. Participants can skip any
& Discomfort	questions they do not wish to answer. All findings will be presented in
a Disconnort	summary form and will not identify participants by name.

Potential Benefits	There are no direct benefits from participating in this research. However, it is hoped the recommendations to the induction program due to the results of this study will be used to modify the program to better meet the needs of new and beginning teachers.
Confidentiality	Any potential loss of confidentiality will be minimized. Transcripts and other research materials will not contain individual names. Digital recordings, transcripts and notes will be maintained on a password protected computer and no one other than me will have access to those materials. Any written reports of the findings of this research will not focus on a specific participant but rather presented in summary or aggregate form. No direct quotes will be used.
Right to Withdraw & Questions	Your decision to participate or not participate will not have a positive or negative impact on your employability, relationship with the school system, future promotions or placements. Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized. If you decide to stop taking part in this study, if you have questions, concerns, or complaints, or if you need to report an injury related to this research, please contact the investigator: Naté Hall, (email) nhall923@umd.ed Or Dr. David Imig, College of Education, University of Maryland dmig@umd.edu
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall, College Park, Maryland, 20742 Email: irb@umd.edu; Phone: 301-405-0678 For more information regarding participant rights, please visit: https://research.umd.edu/irb-research-participants This research has been reviewed according to the University of Maryland, College Park and Howard County Public School System's IRB procedures for research involving human subjects.
Statement of Consent	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form. If you agree to participate, please sign and date this form in the box below.

Qualtrics Consent Form for New/Beginning Teachers (Interview)

Welcome to the "High Quality Induction to Ensure High Quality Teaching" research study!

I am interested in gaining a deeper understanding of the effectiveness of the structure and individual components of Howard County Public School System's New Teacher Induction Program. This study consists of two parts - a survey and an interview - to gather school/system leader perspectives on professional learning opportunities that are part of Howard County's Teacher Induction Program. You may participate in one part, or both.

Participation in this study is strictly voluntary and you may decide to terminate your participation at any point with no negative repercussions. Your responses will be kept completely confidential.

No more than 60 minutes is allotted for this interview. Your participation in this research is voluntary. You have the right to withdraw at any point during the study. The principal Investigator of this study, Naté Hall, can be contacted at nhall 923@umd.edu.

Purpose of Study	This research is being conducted by Naté Hall at the University of Maryland, College Park. It is directed by Dr. David Imig, advisor. The purpose of the survey is to gather background information for which interview questions will build on. The purpose of interviews is to gain insight into all new/beginning teacher experiences with Howard County's Comprehensive New Teacher Induction program. The results of these interviews may inform the district's Comprehensive New Teacher induction program.
Procedures	Each interview will be conducted virtually via Zoom. They will be recorded and transcribed. As a participant, you may ask that the interview not be recorded. The interview will not contain any identifying information such as your name or school. I will be the only person who will have access to the transcripts or any reports of the information obtained during these conversations. They will be reported in summary form and will not contain any information that will identify you, your school, or the district.
Potential Risks & Discomfort	There are no known risks to participants. Participants can skip any questions they do not wish to answer. All findings will be presented in summary form and will not identify anyone by name. No direct quotes will be shared.
Potential Benefits	There are no direct benefits from participating in this research. However, it is hoped the recommendations to the induction program due to the results of this study will be used to modify the program to better meet the needs of new and beginning teachers.
Confidentiality	Any potential loss of confidentiality will be minimized. Transcripts and other research materials will not contain individual names. Digital recordings, transcripts and notes will be maintained on a password protected computer and no one other than me will have access to those materials. Any written reports of the findings of this research will not focus on a specific participant responses but rather presented in summary or aggregate form.

	Your decision to participate or not participate will not have a positive or
	negative impact on your employability, relationship with the school system future promotions or placements. Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized.
Right to Withdraw & Questions	If you decide to stop taking part in this study, if you have questions, concerns, or complaints, or if you need to report an injury related to this research, please contact the investigator:
	Naté Hall, (email) nhall923@umd.edu;
	Or
	Dr. David Imig, College of Education, University of Maryland dmig@umd.edu
	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:
	University of Maryland College Park
Participant	Institutional Review Board Office 1204 Marie Mount Hall, College Park, Maryland, 20742
Rights	Email: irb@umd.edu; Phone: 301-405-0678
	For more information regarding participant rights, please visit:
	https://research.umd.edu/irb-research-participants
	This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have
Statement of	been answered to your satisfaction and you voluntarily agree to
Consent	participate in this research study. You will receive a copy of this signed consent form. If you agree to participate, please <u>sign</u> and <u>date</u> this form in the box below.

Appendix D

New/Beginning Teacher Qualtrics Survey

Part 1:	What level do you teach?
	Elementary
	Middle
	High
	How many years have you taught in Howard County Public School System?
	1 year
	2 years
	3 years
	4 years
	Did you participate in Howard County's New Teacher Induction Program (New Teacher/Educator Induction (NTO/NEO), FIA 1 and/or 2, etc)?
	Yes
	No

Identify which componer and during which year.	Identify which components of a high quality new teacher induction program you engaged in and during which year.			
	Year 1	Year 2	Year 3	N/A; I did not participate in this activity
New Teacher/Educator Orientation (Before the start of the school year)	0	0	0	0
County Provided Mentor	0	0	0	0
System-wide, scaffolded professional development	0	0	0	0
Administrative Support	0	0	0	0
Visits to/Observation of Exemplary/Experienced Teacher's Classrooms	0	0	0	0
Networking Opportunities	0	0	0	0
PD to Address New Teacher Needs/Concerns	0	0	0	0
On-going formative review/follow-up discussions on new teacher performance	0	0	0	0
Reduced Workload	0	0	0	0
Teacher Evaluation Model	0	0	0	0
Would you like to participate induction experience?		-		
Yes				
No				
If yes, please enter your nar	ne and the em	nail address you	would like me	to use to contact you.
List the components (you	ol level (i.e.	Monthly after		
school mentor, school-ba	iseu onenta	uon, etc).		

Part 2:

Appendix E

New/Beginning Teacher Interview Protocol

Welcome and Opening (5 minutes)

My name is Naté Hall and I am currently a doctoral candidate at the University of Maryland, College Park earning a doctorate in Educational Leadership focusing my research on gaining a better understanding of Howard County s new teacher induction program. This dissertation study, "High Quality Induction to Ensure High Quality Teaching" is designed to explore the effectiveness of the structure and components of the new teacher induction program. Participation in this study is strictly voluntary and you may decide to stop participating at any point with no negative repercussions. I have obtained permission from **Howard County** Public School System and the University of Maryland's Institutional Review Boards (IRB) to conduct a multifaceted study that includes 1:1 interviews with 20-30 new and beginning teachers (those who just completed their 1st-4th years of teaching). Each interview will follow a pre-established, structured protocol. For accuracy, I would like to record interviews, ensuring that participant names, schools, and responses will be kept confidential. All information will be retained by me on an encrypted flash drive used only on my personal password protected computer. You may terminate your participation at any time. Please let me know if I may record this session by saying yes, if I can, and no, if you would like me not to record this interview. Summarized results of this study may be presented at professional conferences or published in professional journals and may help inform the district about additions or modifications to their New Teacher Induction program that could increase teacher retention and prepare new teachers for a long career in education. Direct quotes from participants will *not* be included.

Thank you for offering your time to help me gain insight into a new/beginning teacher's experience entering **Floward County** and their new career in education. Prior to today, you completed a Qualtrics Survey. The survey gave me some basic knowledge about the induction activities that you were invited to participate in and when. What this survey is unable to convey is your passion for what you do. Education is a challenging career that not only requires individual skill, but also collaboration and a mindset of continuous growth. Professional learning opportunities, such as the New Teacher Induction Program, are opportunities to learn and grow alongside one another and build educators' capacity to do this work for, hopefully, 30+ years. As we all know, quality learning experiences are essential at every level so again I want to thank you for this time to hear about your induction experiences at the school and district level, in hopes of improving the induction experiences of future teachers to come to **Floward**

Interview (45-50 minutes)

The interview questions will be open ended and based on the elements within Wong's research and state's regulations, or the Code of Maryland Regulations which is the official compilation of all administrative regulations issued by agencies of the state of Maryland. Remember, participation in this study is strictly voluntary and you may decide to stop participating at any point with no negative repercussions.

Opening Question

1. Please share your understanding of **Howard County's** Comprehensive Teacher Induction Program and its components (number of years, activities, etc.).

Core Questions

- 1. Take a minute to reflect on your new teacher orientation experience. What was that experience like for you? Additional follow-up questions to this response might include, "What did you feel was most valuable about this experience?" or "What might have been missing?"
- 2. Describe how your mentor helped to improve your professional practice. Additional follow-up questions to this response might include, "What was the most valuable contribution of your mentor?" or "How could your mentoring experience have been more beneficial to your growth as an educator?"
- 3. What professional learning opportunities did you have that were specifically designed to meet your needs/concerns as a new/beginning teacher? Additional follow-up questions to this response might include, "What opportunities do you feel every new/beginning teacher should have?" or "What opportunities do you feel were missing?"
- 4. Describe what administrator support looked like for you as a new/beginning teacher. Additional follow-up questions to this response might include, "Were there regular opportunities for review/follow up discussions on your practice with your administrators?" or "What kind of support did you need, but did not receive, from your administrators?"
- 5. Describe the opportunities that you were given to collaborate with, and learn from, experienced teachers (i.e. co-teaching, observing, etc.). Additional follow-up questions to this response might include, "If you were not afforded this opportunity, how could this experience have benefited your professional growth?" or "What did you learn from this experience?"
- 6. What networking opportunities exist for new teachers to build support, commitment, and leadership in the learning community? Additional follow-up questions to this response might include, "How/when were you able to take advantage of these opportunities?" or "What opportunities were missing?"
- 7. Describe the best practices modeled by induction staff (at the district and/or school level) throughout professional learning experiences?

 Additional follow-up questions to this response might include, "What techniques/strategies were modeled that you took back and used in your classroom?" or "What supports did you receive from induction staff in adding best practices to your professional practice "tool box"?"

Closure Questions

- 1. What experience(s) could enhance **Howard County's** Comprehensive New Teacher Induction Program?
- 2. Is there anything else you want me to know or consider related to New Teacher Induction in HOPSS?

Closing

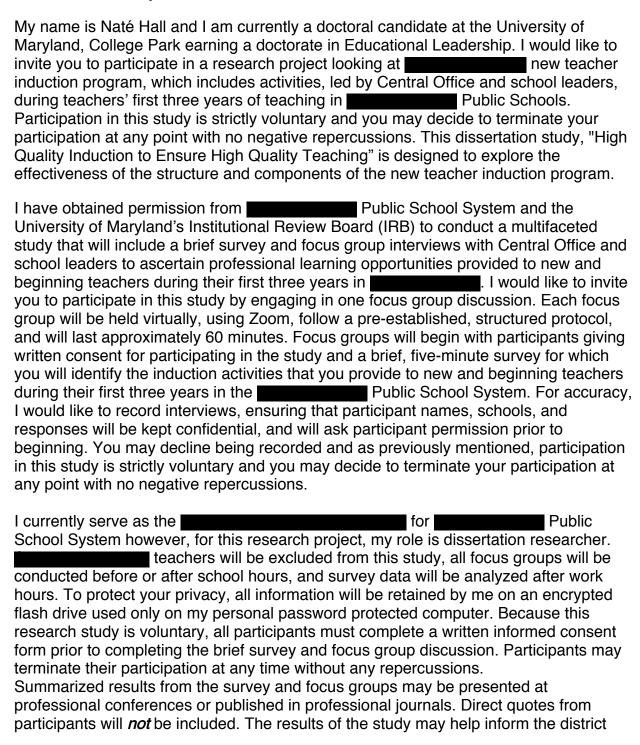
This concludes our interview today. I will be reviewing the data you provided and combining it with information from the other new/beginning teacher interviews. Again, what you shared today is confidential and though a summary of your ideas will be shared, individual statements will not be identifiable. With this information, I will be able to determine a current state related to **Floward County's** New Teacher Induction Program as well as make recommendations for how to improve it for all new/beginning teachers across the school system. Your contributions have been very valuable to this process. Thank you very much for taking the time to participate today and thank you for the work you do to support our students everyday. If you have any questions, concerns, or any additional information you would like to share, please contact me at nhall923@umd.edu.

Appendix F

Email to School and Curricular Leaders (Research Study Participation)

Insert Date

Dear School and System Leaders:



about additions or modifications to their New Teacher Induction program that could increase teacher retention and prepare new teachers for a long career in education. Please keep this email for your records, and feel free to contact me with questions or comments via email at nhall923@umd.edu. Please click here, to indicate your willingness to participate in this study. Your assistance is greatly appreciated!

Respectfully,

Naté L. Hall, Doctoral Candidate Doctorate in Education, UMD College Park

Appendix G

Reminder Email to New/Beginning Teachers

Insert Date
Dear Teacher:
About a week ago (insert original email date here), I sent an email inviting you to participate in a research project looking at new teacher induction program, which includes activities led by Central Offices (such as the Office of Teacher & Paraprofessional Development, curricular offices, etc.) and your school leaders during your first three years of teaching in Public Schools. This dissertation study, "High Quality Induction to Ensure High Quality Teaching" is designed to explore the effectiveness of the structure and components of the new teacher induction program.
Participation in this study is strictly voluntary and you may decide to terminate your participation at any point with no negative repercussions. I would like to invite you to participate in this study by engaging in a brief, five-minute survey that identifies the induction activities that you engaged in during your first three years in the Public School System. The final question of the survey will ask if you would like to participate in one interview conversation to expound upon your survey answers which identified the supports you received as a new/beginning teacher in
Thank you for your consideration! I greatly appreciate any assistance you may be able to provide!
Survey Link: Click Here
Respectfully,

Naté L. Hall, Doctoral Candidate Doctorate in Education, UMD College Park

Appendix H

Email - Focus Group Confirmation and Details

Insert Date

Dear School and System Leaders:

Thank you so much for your willingness to participate in this dissertation study, "High Quality Induction to Ensure High Quality Teaching." Your perspective as a system leader will be an invaluable asset to this study. This study is designed to explore the effectiveness of the structure and components of the new teacher induction program and solicit your specific and unique ideas and contributions. Please remember that participation in this study is strictly voluntary and you may decide to stop participating at any point with no negative repercussions.

Survey results may be presented at professional conferences or published in professional journals. Direct quotes from participants will *not* be included. The results of the study may help inform the district about additions or modifications to their New Teacher Induction program that could increase teacher retention and prepare new teachers for a long career in education.

Your time and assistance is greatly appreciated! Please find the details of your focus group below.

Focus Group #	
Date and Time	
Zoom Information	

If you have any questions or concerns, please do not hesitate to reach out to me at nhall923@umd.edu

Respectfully,

Naté L. Hall, Doctoral Candidate Doctorate in Education, UMD College Park

Appendix I

Focus Group Consent Form

Welcome to the "High Quality Induction to Ensure High Quality Teaching" research study!

I am interested in gaining a deeper understanding of the effectiveness of the structure and individual components of Howard County Public School System's New Teacher Induction Program. This study consists of two parts - a survey and a focus group - to gather school/system leader perspectives on professional learning opportunities that are part of Howard County's Teacher Induction Program. Participation in this study is strictly voluntary and you may decide to terminate your participation at any point with no negative repercussions. Your responses will be kept completely confidential.

The survey should take you around 5 minutes to complete and the focus group, no more than 60 minutes. Your participation in this research is voluntary. You have the right to withdraw at any point during the study. The principal Investigator of this study, Naté Hall, can be contacted at nhall923@umd.edu.

Purpose of Study	This research is being conducted by Naté Hall at the University of Maryland, College Park. It is directed by Dr. David Imig, advisor. The purpose of the survey is to gather background information for which focus group questions will build on. The purpose of focus groups is to gain insight into individual school and curricular office contributions to Howard County's Comprehensive New Teacher Induction program. The results of these surveys and focus groups may inform the system's Comprehensive New Teacher induction program.
Procedures	First, you are being asked to participate in a survey. The survey will take approximately five minutes to complete and consists of four questions. Next, I invite you to participate in a focus group discussion, which will last no more than 60 minutes. The focus group will ask you to expound on your survey responses by sharing your unique contributions to the induction program at the school level. Focus groups will be conducted virtually, via Zoom and will be recorded and transcribed. You may request that the focus group not be recorded. The focus group discussions will not contain any identifying information such as your name or school/office. I will be the only person who will have access to the transcripts or any reports of the information obtained during these focus groups. They will be reported in summary form and will not contain any information that will identify you, your school, or the district.
Potential Risks & Discomfort	There are no known risks to participants. Participants can skip any questions they do not wish to answer. All findings will be presented in summary form and will not identify anyone by name. No direct quotes will be shared.
Potential Benefits	There are no direct benefits from participating in this research. However, it is hoped the recommendations to the induction program due to the results of this study will be used to modify the program to better meet the needs of new and beginning teachers.

Confidentiality	Any potential loss of confidentiality will be minimized. Transcripts and other research materials will not contain individual names. Digital recordings, transcripts and notes will be maintained on a password protected computer and no one other than me will have access to those materials. Any written reports of the findings of this research will not focus on a specific participant responses but rather presented in summary or aggregate form.
Right to Withdraw & Questions	Your decision to participate or not participate will not have a positive or negative impact on your employability, relationship with the school system, future promotions or placements. Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized. If you decide to stop taking part in this study, if you have questions, concerns, or complaints, or if you need to report an injury related to this research, please contact the investigator: Naté Hall, (email) nhall923@umd.edu Or Dr. David Imig, College of Education, University of Maryland
Participant Rights	dmig@umd.edu If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall, College Park, Maryland, 20742 Email: irb@umd.edu; Phone: 301-405-0678 For more information regarding participant rights, please visit: https://research.umd.edu/irb-research-participants This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form. If you agree to participate, please sign and date this form in the box below.

Appendix J

Focus Group Participant Survey

art 1:	What level do you supervise?
	Elementary
	Middle
	High
	Curricular Office
	Did you contribute to Howard County's New Teacher Induction Program?
	Yes
	No

Part 2:

Identify which components of a high quality induction program you engage new teachers in, at the school level, and during which year.

	Year 1	Year 2	Year 3	N/A; The school did not offer
New Teacher/Educator Orientation (Before the start of the school year)	0	0	0	0
County Provided Mentor	0	0	0	0
System-wide, scaffolded professional development	0	0	0	0
Administrative Support	0	0	0	0
Visits to/Observation of Exemplary/Experienced Teacher's Classrooms	0	0	0	0
Networking Opportunities	0	0	0	0
PD to Address New Teacher Needs/Concerns	0	0	0	0
On-going formative review/follow-up discussions on new teacher performance	0	0	0	0
Reduced Workload	0	0	0	0
Teacher Evaluation Model	0	0	0	0
ist other components tha fter-school New Teacher	-			

Appendix K

Focus Group Protocol

Welcome and Opening (5 minutes)

My name is Naté Hall and I am currently a doctoral candidate at the University of Maryland, College Park earning a doctorate in Educational Leadership focusing my research on gaining a better understanding of Howard County's new teacher induction program. This dissertation study, "High Quality Induction to Ensure High Quality Teaching" is designed to explore the effectiveness of the structure and components of the new teacher induction program. Participation in this study is strictly voluntary and you may decide to terminate your participation at any point with no negative repercussions. I have obtained permission from Howard County Public School System and the University of Maryland's Institutional Review Boards (IRB) to conduct a multifaceted study that includes focus groups with school and central office leaders. Each focus group will follow a pre-established, structured protocol. For accuracy, I would like to record focus group discussions, ensuring that participant names, schools, and responses will be kept confidential. All information will be retained by me on an encrypted flash drive used only on my personal password protected computer. You may terminate your participation at any time. Please let me know if I may record this session by saying yes, if I can, and no, if you would like me not to record this interview. Summarized results of this study may be presented at professional conferences or published in professional journals and may help inform the district about additions or modifications to our New Teacher Induction program that could increase teacher retention and prepare new teachers for a long career in education. Direct quotes from participants will *not* be included.

Thank you for offering your time to help me gain insight into Toward County's Teacher Induction program from a school/central office leaders' perspective. Education is a challenging career that not only requires individual skill, but also collaboration and a mindset of continuous growth. Professional learning opportunities, such as the New Teacher Induction Program, are opportunities to learn and grow alongside other educators and build educators' capacity to do this work for, hopefully, 30+ years. As we all know, quality learning experiences are essential at every level so again I want to thank you for this time to hear about the unique opportunities you offered to our new/beginning teachers as they embark on their new career in Toward County.

As we engage in this conversation, let's keep a few things in mind. First, to better help me identify your specific contributions to this discussion later while reviewing my notes and this recording, if allowed, when you speak, please identify yourself by your assigned pseudonym before sharing your thoughts. Also, I want to encourage free-flowing conversation among everyone here so feel free to expand on, highlight, and/or borrow the ideas of your colleagues. And lastly, with a short amount of time and multiple voices, let's share the air and give everyone a chance to share their thoughts and ideas.

Interview (45-50 minutes)

The focus group questions will be open ended and based on the elements within Wong's research and state's regulations. Remember, participation in this study is strictly

voluntary and you may decide to stop participating at any point with no negative repercussions.

Opening Question

1. Please share your understanding of **Howard County's** Comprehensive Teacher Induction Program and its components (number of years, activities, etc.).

Core Questions

- 1. Take a minute to reflect on the new teacher orientation experience that you provide at your school/department. What is that experience like for new/beginning teachers? Additional follow-up questions to this response might include, "What did you feel was most valuable about this experience?" or "What might have been missing?" or "How does this experience differ from the Orientation provided by others in "Toward Count"?"
- 2. Describe how you select and assign mentors to new teachers within your building/department. Additional follow-up questions to this response might include, "What was the most valuable aspect of mentor-mentee relationships?" or "How are mentors supported in helping to improve new/beginning teacher professional practice?"
- 3. What professional learning opportunities do you offer that are specifically designed to meet the needs/concerns of new/beginning teachers and what are the desired outcomes of these opportunities? Additional follow-up questions to this response might include, "How do you evaluate these professional learning opportunities?" or "What opportunities do you feel were missing?" or "When do you provide these opportunities and who is responsible for their implementation?"
- 4. Describe what support looks like for new/beginning teachers from you, their administrator/curricular office leader. Additional follow-up questions to this response might include, "Are there regular opportunities for review/follow up discussions on their practice?" or "What barriers exist to providing support to new/beginning teachers?"
- 5. Describe the opportunities provided to new/beginning teachers to collaborate with, and learn from, experienced teachers (i.e. co-teaching, observing, etc.). Additional follow-up questions to this response might include, "What barriers exist to providing this type of support to new/beginning teachers?" or "How could new/beginning teachers benefit from this type of experience?"
- 6. What networking opportunities exist for new teachers to build support, commitment, and leadership in the learning community?

Additional follow-up questions to this response might include, "How/when are they able to take advantage of these opportunities?" or "What opportunities are missing?"

7. Describe the best practices modeled by induction staff (at the school/district level) throughout professional learning experiences?

Additional follow-up questions to this response might include, "What techniques/strategies are modeled?" or "What supports from induction staff are offered to new/beginning teachers as they add modeled best practices to their professional practice "tool box"?"

Closure Questions

- 1. What experience(s) could enhance **Howard County's** Comprehensive New Teacher Induction Program?
- 2. Is there anything else you want me to know or consider related to New Teacher Induction in **ECPSS**?

Closing:

This concludes our focus group today. I will be reviewing the data you provided and combining it with information from the other school/central office leaders. Again, what you shared today is confidential and though a summary of your ideas will be shared, individual statements will not be identifiable. With this information, I will be able to determine a current state related to our New Teacher Induction Program as well as make recommendations for how to improve it for all new/beginning teachers across the school system. Your contributions have been very valuable to this process. Please remember to share agendas (participant & insiders), feedback, PowerPoint, and other resources as part of the study's document analysis. Thank you very much for taking the time to participate today and thank you for the work you do to support our teachers and students everyday. If you have any questions or any additional information you'd like to share, please contact me at nhall923@umd.edu.

Appendix L

Document Analysis Table

Document/Media Selected	Content	Concepts Illuminated/Connection to state's regulations & Wong	Evidence of Gaps/What's Missing
Canvas Communities (Canvas-learning management system; Community- a place for each department, course, or content area to post resources and other important information) The New Educator New Educator Orientation (NEO) NEO Planning	Learning Management System (LMS) resources for new/beginning teachers to use before and during their non-tenured years	The New Educator (For Teachers): My School-Get up to speed on your assigned school, first week events, and some todo's; My Technology-Jump start your learning about Canvas and the digital tools you'll be using; My Instruction-Get connected with your curriculum and program area resources; My Supports-Find out who can help you; My Evaluation-Learn how you will be evaluated; My Growth-Review the professional learning opportunities you will have. New Educator Orientation (NEO)(For Teachers): Overview of days, registration link, what to expect, quick link buttons, Technology Training links, New Educator Resources NEO Planning (For Curricular Office Leaders): "One-stop spot" to get the resources CO leaders need and stay on track with planning "to do's" for NEO; announcements for new information and reminders; NEO program, registration, vacancy list	 School leader component Information about/for mentors Lack of networking opportunities
Comprehensive Teacher Induction Page	Summary of the Comprehensive Induction program	Program Goals: As we welcome, support and develop our new teachers our goals focus on: Creating classrooms where	 "Program Components" do not include school or curricular components or evaluation

	goals and components	diversity, equity and inclusion are valued; Enhancing teacher performance; Improving classroom instruction; Accelerating student learning; Increasing teacher retention rates; and Creating collaborative school cultures Program Components: New Teacher Orientation, Instructional Mentoring Program, Teacher Development Liaisons, Professional Learning Sessions (summary of each with link to individual content page)	information NEO header is mislinked to inaccurate webpage
New Educator Orientation (NEO) 2018-2021 (Agendas & Resources)	Agendas and resources for NEO facilitators and participants between 2018-2021	 Explore our dedication to our values of diversity, equity and inclusion; Establish relationships with leaders in your program area; Explore the curriculum, resources and expectations that will lead to your success. Continue planning your journey towards skillful implementation of your role in Enjoy lunch served by the Board of Education and system leaders. 	 No school component No mentor component
NEO 2018-2021 Feedback	Feedback from NEO participants in 2018-2021	 To what degree did you feel welcomed to the school system throughout New Teacher Orientation? (99.3% Agree/Strongly; 99.3% Agree/Strongly; 98.4% Agree/Strongly) I gained an understanding of County's vision for diversity, equity, and inclusion. (100% Agree/Strongly; 100% Agree/Strongly; 98.4% 	Feedback responses/NEO attendees 2018: 138/428 (32%) 2019: 159/329 (48%) 2020:/260 2021: 187/434 (43%)

		Agree/Strongly, 1.6% Disagree) The program area sessions on Tuesday and Wednesday provided the resources and knowledge I need to prepare me for the first few weeks of the school year. (88.3% Agree/Strongly, 3.6% Disagree/Strongly, 5.1% Disagree; 95.1% Agree/Strongly, 5.1% Disagree; 95.1% Agree/Strongly, 4.8% Disagree/Strongly) The content of program area sessions was differentiated to meaningfully meet my learning needs. (85.4% Agree/Strongly, 5.1 Disagree/Strongly, 7.7% Disagree/Strongly, 7.7% Disagree/Strongly, 7.6% Disagree/Strongly, 7.6% Disagree/Strongly)	
Framework in Action (FIA) 1 2018-2020 (Agendas & Resources)	Agendas and resources for FIA 1 facilitators and participant between 2018-2020	 Intentions & Goal Setting 1b, 2a, 2b, 2c, 2d Overview & Exploration Guiding Principles & Backwards Design 	 No school component No mentor component Collaboration among new teacher + 2 CO department 2020 COVID: No training
FIA 2 2018-2020 (Agendas & Resources)	Agendas and resources for FIA 2 facilitators and participant between 2018-2020	 Personal Journey/Identity Danielson FfT Common Themes, 2b Cultural Perceptions/My Culture Power of high expectations/Pygmalion Effect Historical Documents/Diversity Line Cultural Proficiency/Barriers to CP/Guiding Principles of CP 	 No school component No mentor component Collaboration among new teacher + 1 CO department

		Student Voice	
FIA 1 & 2 2018-2020 Feedback	Feedback from FIA 1 & 2 participants in 2018-2020	 This three-day professional learning experience has influenced the way in which I view my relationships with students, staff, and parents (78.3% Agree/Strongly; 6.8% Disagree/Strongly) Rate to which this PL gave you the opportunity to Reflect on your professional practice and set specific goals for continued improvement. (89.2% Agree/Strongly; 10.9% Disagree/Strongly) Strengthen commitment to equity and relationships across differences. (91.9% Agree/Strongly; 8.1% Disagree/Strongly) Feel valued as a member of the community and its commitment to learning and leading with equity. (87.9% Agree/Strongly; 12.2% Disagree/Strongly) 	2018: Day 2-68 responses; Day 3-27 responses 2019: 74 responses/147 registered 2020 COVID: No training
Focus on the Framework PL experiences	Through this series of face-to-face professional learning modules, facilitated by the Teacher Development Liaison (TDL), we seek to provide relevant and	 Session Titles (Danielson Components) The Power of Language on Mindset (2b, 3a, 4a) The Impact of Quality Feedback (1e, 1f, 3d, 4a) Maximizing Your Resources (1d, 4d, 4e,4f) Managing Student Behavior (2c, 2d) 	2018-19: 35 schools (of 77) • no modules completed (5) • 1-3 modules completed (29) • 4-5 modules completed (14) • 6+ modules completed (6) 2019-20: 54 schools (of 77) • no modules completed (1) • 1-5 modules completed (24)

	engaging learning experiences in which participants: • Discuss how to Build Collegial Relationships • Reflect & Commit to Continuous Improvement • Highlight Growth through Evidence	 Making the Most of Your Time (1d, 4a) Examining My Classroom Culture (2b, 2a, 1b) Empowering Students Through Procedures & Routines (2a, 2c) Differentiating Meaningfully: Knowing ALL Learners (1b, 1c, 3c) Building Meaningful Relationships With Students (1b, 2a, 4f) All sessions are aligned to the Danielson Framework, have outcomes, and driving questions. 	 6-10 modules completed (8) 11-20 modules completed (2) 2020-21: 44 schools (of 77) no modules completed (19) 1-5 modules completed (9) 6-10 modules completed (8) 11-20 modules completed (8)
Instructional Mentoring (Agendas & Resources)	Agendas and resources for instructional mentors and mentees	Outcomes: 2018-19 • Meeting #1-3: Participants will • calibrate their non-evaluative observation and Danielson alignment practices • engage in learning with peers in order to reflect and refine mentoring practices 2019-20 • Meeting #1: Participants will • Explore the elements of trust in the learning partnership between mentors and mentees and teachers and students. • Meeting #2: Participants will • deepen their mentoring practice based on choice reading, reflection, and discussion; • enhance their awareness of the state of stress and burnout in the	 Formal training is for county assigned central office and school based mentors No training provided for inschool, informal mentors

	20	teaching profession and brainstorm ways to support their new teachers dealing with stress. 20-21 Meeting #1: Participants will review & discuss applying the virtual observation toolkit receive updates & affirm expectations about instructional mentoring share ideas around best practices in virtual mentoring Meeting #2: Participants will generate ideas to help mentees manage workload expanding knowledge and skills to support teacher overwhelm and stress receive updates about instructional mentoring	
2019 Annual Board Report (Teacher Retention)	ration data	staff=53.6%, Support staff=37.9%	Optional exit interview

		Five Years of Teaching, 2019 (Averages between 2006-2019):	
Department of Special Ed NEO Canvas Page	Content specific reference page for new/beginning teachers during New Educator Orientation (NEO)	Agendas for	 School level supports Follow-up professional learning opportunities Special ed specific evaluation model (special educators attended the general session with general educators) Mentoring opportunities
Secondary Mathematics NEO Canvas Page	Content specific reference page for new/beginning teachers during New Educator Orientation (NEO)	 Outcomes Agenda by day with resources (readings, homework, curricular resources previews) linked NEO resources by day What to expect in the first 30 days Parent-Teacher Conferences Back to School Night Teacher Evaluations Special Education in What You Need to Know 	 School level supports Mentoring opportunities Follow-up professional learning opportunities
Fine Arts NEO Canvas Page	Content specific reference page for	Overview of important peopleOutcomes	School level supportsEvaluation model

	new/beginning teachers during New Educator Orientation (NEO)	 Schedule with hyperlinked resources Links to curricular Canvas courses within the Fine Arts department 	 Mentoring opportunities Follow-up professional learning opportunities
Elementary Science NEO Canvas Page	Training materials for the 2.5 hour training during NEO	 Interactive science presentations and discussions (2) Reflection and synthesis related to all subjects Closing activity - leverage relationships built during the time 	 School level supports Evaluation model Mentoring opportunities Follow-up professional learning opportunities

Appendix M

UMD IRB Approval



1204 Marie Mount Hall College Park, MD 20742-5125 TEL 301.405.4212 FAX 301.314.1475 irb@umd.edu www.umresearch.umd.edu/IRB

DATE: October 11, 2021

TO: Naté Hall, Ed.D

FROM: University of Maryland College Park (UMCP) IRB

PROJECT TITLE: [1783451-2] High Quality Induction to Ensure High Quality Teaching REFERENCE #:

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVED

APPROVAL DATE: October 11, 2021 EXPIRATION DATE: August 3, 2022 REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of Amendment/Modification materials for this project. The University of Maryland College Park (UMCP) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Prior to final approval of this project scientific review was completed by the IRB Member reviewer

This submission has received Expedited Review based on the applicable federal regulations. This project has been determined to be a MINIMAL RISK project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of August 3, 2022.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Unless a consent waiver or alteration has been approved, Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate Amendment forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office. Please note that all research records must be retained for a minimum of seven years after the completion of the project.

- 1 - Generated on IRBNet

If you have any questions, please contact the IRB Office at 301-405-4212 or irb@umd.edu. Please include your project title and reference number in all correspondence with this committee.
This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Maryland College Park (UMCP) IRB's records.
- 2 - Generated on IRBNet

Appendix N

District IRB Approval

TO:

Nate Hall

FROM: DATE:

September 24, 2021

RE:

Research Request

Thank you for submitting your application to conduct research in the School System. Your research is titled "High Quality Induction to Ensure High Quality Teaching."

The research committee has reviewed your application and your research request is approved, given the following requirements:

Confidentiality considerations

- The name of the school district is de-identified in your research; the school system is identified as "a medium-sized public school district in a Mid-Atlantic state in the United States." Any references to these entities (school(s), district, state) should be consistent with this de-identification guideline. This includes de-identifying to it as "state codes."
- Should any schools be shared by participants, the schools are de-identified and indicated as "schools in the district."
- Code responses in such a manner that confidentiality of participants is maintained to the highest degree possible. To that end, any information collected that, alone or in combination with other information presented, may personally identify any participants must be removed.
- Student confidentiality: While unlikely, ensure that participants are told not to share student names or information that might identify a student. This goes beyond sharing the student's name and includes information about a student where that student could be reasonably identified (e.g., a female, Hispanic student with an IEP who is in Ms. X's class). Should a participant inadvertently share such identifying information, all reasonable measures are taken to remove that information from the transcript/recording.
- As stated in your materials, summarized and de-identified results from the survey, focus
 groups, and interviews may be presented at professional conferences or published in
 professional journals. Direct quotes from participants will not be included.

Participants

As you have stated in your research protocol, ensure that participants are aware that
participation in the study is strictly voluntary and they can decide to stop participating at
any point with no negative repercussions.

Dual Role

hours; please work with your supervisor to determine the subsequent leave to take for any portion being implemented during the work day.
 You have permission to send out the survey and begin recruiting and scheduling focus groups/interviews now; the earliest to begin implementation of the focus groups/interviews is November 1, 2021. However, work with your points of contact (listed below) to determine a timeframe that works best for the participants, based on system needs.
Your points of contact are as follows:
 As stated in your updated application, remove leaders from the Department of Program Innovation and Student Well-being from your sample. Include a copy of (or reference to) this letter when communicating with staff about this project so they are aware it has been reviewed and approved. While you have permission to conduct the research study now, if you decide to move the data collection to the next school year, please let us know.
You have permission to recruit potential participants via email one time with no more than one reminder email.
As per Policy 3030, within thirty (30) calendar days of completing data collection, send an email indicating the completion of data collection to the Superintendent/Designee Indicate here the estimated date of data collection completion 12 31 21

Ensure that to the highest extent possible, any potential impact of your dual role as a staff
member and a researcher is minimized. This includes but is not limited to refraining
from using your work email address to correspond with potential participants.

Time spent implementing your project is not to take place during your work

Office and

As stated in your application, remove staff from the

teachers from your sample.

 Within the timeframe estimated in the approved research proposal, submit an interim report if applicable, a final report, and an executive summary to the Superintendent/Designee Indicate here the estimated date of submission for interim report; final report; and Executive Summary ; Within thirty (30) calendar days of receiving all required document as specified in above, a letter of completion will be sent to the researcher from the Superintendent/Designee.
 Should you decide to present or publish your findings beyond your dissertation, work with your direct supervisor and the Superintendent/Designee for permission/guidance regarding data privacy.
Violations of the conditions stated in this letter are subject to Policy 7030 Employee Conduct and Discipline.
Agreement from researcher and dissertation chair.
 Please sign and return this letter indicating you and your dissertation chair understand and plan to adhere to these conditions.
Naté L. Hall, Nati Stall, 9/24/21
Researcher name, signature, and date
David G. Imig David G. Amig 9/25/21
Dissertation chair name, signature, and date
On behalf of the review committee, we wish you much success in the completion of your study.

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