

Running Head: STAYING AFLOAT AS A NEW TEACHER

Staying Afloat as a New Teacher: A Case Study Evaluation of a Middle School Induction
Program

By

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Abstract

Almost half of new teachers leave the profession or change teaching jobs in their first five years (Ingersoll & Smith, 2004). Unfortunately, when turnover is high, students suffer because they learn from inexperienced or unqualified teachers (Sutcher, Darling-Hammond & Carver-Thomas, 2016). However, to improve teacher quality, schools should invest in induction. As of 2000, 80% of schools have implemented induction programs that attempt to provide support through mentoring, collaboration, and/or workshops (Ingersoll & Smith, 2004). At a suburban middle school, turnover has led to the development of an induction program with more interventions. Utilizing Situated Learning Theory, this case study sought to evaluate whether the induction program addressed the challenges first, second, and third-year teachers faced. Data collection included transcripts from semi-structured interviews and one-legged interviews, in addition to observational write-ups, written artifacts, field notes, and survey results. The findings indicated:

- Teachers felt supported, although they struggled to articulate how they were assisted.
- First-year teachers struggled with management, formative assessment, school procedures, and curriculum. While they sought out mentors, curriculum teams, supervisors, and expertise from workshops, some still had difficulties with school procedures and curriculum interpretation.
- Second-year teachers struggled with curriculum, planning for special education classes, and pressures to perform. While they consulted with mentors and curriculum teams, they still had difficulty lesson planning.
- Third-year teachers had fewer struggles and focused on better meeting the needs of students.
- Peer-observations, mentoring relationships, and evaluative feedback were perceived to

be the most effective induction supports. Other supports were also identified as effective, although teachers acknowledged areas for improvement.

After compiling the findings, recommendations include:

- Expanding the selection criteria for mentors.
- Providing a basic overview of school procedures during new teacher training.
- Providing summer time for mentors and mentees to peruse the curriculum.
- Shortening the duration between initial and follow-up workshops.
- Creating more opportunities for peer-observations.
- Encouraging grade-level departmental teams to develop norms.
- Engaging in reflective dialogue as part of curriculum teamwork.
- Establishing monthly check-ins with first-year teachers.

Overall, it is perceived that adherence to the recommendations could improve retention efforts and facilitate teacher development.

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Chapter I

Problem Statement

Each September, millions of teachers enter classrooms with hopes of inspiring a new generation of students and making a difference in their lives. Yet, despite such idealism, many do not continue in the profession, leaving early in their careers (Ingersoll & Smith, 2004). The numbers are quite staggering when it comes to new teachers. After five years, some researchers estimate a 50% attrition rate (Ingersoll & Smith, 2004; Kain, 2011; Omer, 2011). At the same time, minority teachers are at a heightened risk for career departure. According to the most recent Student and Staff Survey conducted by the National Center of Educational Statistics (2012), after the 2010-2011 school year, 10% of new Black educators left the profession and 12% transferred to new schools, whereas only 7.5% of new White teachers left and 7.5% switched schools. Educators who enter teaching as alternate-route candidates, or teach in schools with a high concentration of minority students or students living in poverty, similarly leave in greater numbers (Sutcher, Darling-Hammond, & Carver-Thomas, 2016).

Educational statisticians have warned that a high turnover rate, coupled with impending retirements, will create the likelihood of a shortage of highly qualified professionals (Aaronson & Meckel, 2009). Despite such admonitions, some now contend that the United States has a teacher employment crisis at hand. Not only has the number of prospective teachers at the university level declined from 2009 when there were 691,000 to 451,000 in 2014, but there are also far fewer candidates entering special education, science, and bilingual education (Sutcher et al., 2016). While Sutcher et al. (2016) assert that the recruitment of new teachers is imperative, they also note that

policymakers and administrators must focus their efforts equally on retention. The hiring, training, and development of new educators on average costs district \$12,000 per new hire (Carver, 2003). When this cost is recurring because of excessive turnover, it adds an unnecessary expense to school budgets.

Teacher Induction

One strategy for addressing the problem of attrition would be to spend money on quality induction programs. Induction programs are an organized series of professional development interventions intended to acclimate new educators in their first two to five years of teaching (Wong, Britton & Ganser, 2005). The aim of induction is to reduce attrition through ongoing support for new teachers. The literature suggests that effective induction programs should provide new teachers with mentors, collegial support, and inquiry skill development over the course of several years (Howe, 2009; Ingersoll & Smith, 2004; Wong et al., 2005).

Strong mentorship programs entail planning, reflecting, and observing valued classroom practices with mentor colleagues. By providing new teachers with a mentor, in particular in the same department, they acquire the opportunity to learn firsthand from a veteran or master teacher with ample experience in the same content area (Abell et al., 1995; Buchanan et al., 2013; Jorissen, 2013; LoCascio, Smeaton, & Waters, 2016; Paris, 2013). In addition, new teachers require collegial support to discuss their pedagogy; unfortunately, many are reserved about their practices for fear of appearing incompetent. Because novice teachers are also emerging in their use of pedagogical techniques, they must develop professionally through coursework and inquiry. The latter refers to teachers' engagement in learning through critical discussion of issues in the classroom,

and reflection on practice to improve their pedagogy (Ball & Cohen, 1999). Some induction programs, in particular in other countries, recognize that being new to the profession can be overwhelming, and as a result provide novice teachers with a smaller workload. Consequently, new teachers are able to spend more time reflecting, observing, and reading (Howe, 2009). Inquiry development, though, also relies on teachers to cultivate collegial relationships, rather than congenial ones, through discussion of practice and the acceptance of constructive feedback (Curry, 2008; Franzak, 2002; Silva, 2005; Vo & Nguyen, 2010).

District Induction

The induction program at my middle school has been subject to significant reform within the past few years. Originally, new teachers were provided with several interventions to assist in their development. First, they were assigned a mentor for help with general pedagogy and problem solving. Second, they were required to attend new teacher training in the summer for their first three years, which included an intensive week of workshops facilitated by veteran teachers and administrators on various topics such as the school philosophy, resources available within the school, and best teaching practices such as cooperative learning. Third, new teachers had to participate in three help sessions to complete the non-tenured portfolio, which consisted of responses to prompts related to each of the evaluation standards. The portfolio is utilized to cultivate reflection, and as a means for administrators to evaluate teachers.

In the last two years, administrators added additional supports including peer-observations, the assistance of a teacher coach, and after-school workshops. During one day of peer-observations, new teachers were provided with substitute coverage to enable

them to observe three veteran teachers. The novice teachers then debriefed at the end of the day with their peers to reflect on what they learned. While the observations were popular, this form of professional development was not sustained throughout the course of the school year. A teacher coach position was also added to both middle schools, with the responsibility of planning and organizing the induction program. Non-tenured teachers had the option of working with the teacher coach in their classes to co-plan, co-teach lessons, or receive formative feedback. Although the teacher coach had to circulate to 25 teachers, the addition was yet another intervention that may have bolstered the induction program. The teacher coach also organized eight after school workshops for first-year teachers to attend, including the portfolio meetings. However, the district chose to cut the position for 2016-2017 school year and utilize the funds elsewhere. The responsibilities for developing the induction program thereafter fell more on administrators, who nevertheless incorporated a series of workshops for first and second-year teachers.

Purpose Statement and Research Questions

Overall, while specific data are not readily available, there has been inconsistent turnover at the middle school over the last five years, with some years seeing significantly more teachers leaving than others. During this period of time, the induction program has also been in the process of reform. Although the induction program in its entirety provides support to new teachers, it is uncertain whether many of the interventions are useful and effective in helping new teachers to address their daily challenges. Furthermore, while the research indicates that professional development should be interactive, relevant to practice, and sustained, it is uncertain whether the

interventions meet these criteria (Putnam & Borko, 2000; Wilson & Berne, 1999). The purpose of this study, therefore, is to conduct a case study evaluation of the middle school induction program to determine its efficacy in helping new teachers face challenges, while contributing to their development. The following research questions are addressed:

- How do the research participants describe the new teacher induction program?
- In what ways does the new teacher induction program help first second, and third-year teachers address their challenges? Even with assistance, what challenges do new teachers face?
- What aspects of new teacher induction are perceived to be most effective? What aspects are perceived to be less effective?

CHAPTER II

Review of the Literature

The purpose of this review of the literature is to analyze theory and synthesize empirical studies in scholarly journal articles, books, and reports to provide insight on quality new teacher induction. I begin by explaining the connection between the proposed study and Lave and Wenger's (1991) Situated Learning Theory. Then, I focus on studies of teacher attrition and burnout to inform the induction process. Thereafter, I review studies of induction activities and programs that have demonstrated potential to lead to a higher retention rate. Lastly, I evaluate the interventions within induction programs to help retain teachers.

Methods of Research

I began my research with the intent of investigating empirical studies on teacher attrition and retention. Hence, I entered the phrase "teacher retention" into the Rutgers general library database, using full-text and peer-reviewed filters. However, I came to the realization that I had to narrow the results after being inundated with results. Although I ended up using several empirical studies from the search, I changed my approach, instead relying more on Google Scholar. A key advantage of Google Scholar was being able to see the authors who were most frequently cited. Thus, I found several renowned researchers on teacher attrition, and was able to locate other studies from their work. Thereafter, I researched comprehensive induction programs, and was able to synthesize some best practices in new teacher development.

Situated Learning Theory

The current study connects theoretically to Lave and Wenger's (1991) Situated Learning Theory. The framework posits that learning takes place through active participation in communities (Lave & Wenger, 1991). In order to master knowledge and skills, members must move toward full participation in practice by cultivating collegial relationships. However, there are two criteria that must be met for Situated Learning to occur. Firstly, the discussion of topics cannot be abstract or overgeneralized. Secondly, learning must take place in a Community of Practice, which can be formal or informal. The Community of Practice must have a purpose that is periodically revisited by members, provide space for socialization, and develop through shared ideas, language, and resources among members (Wenger, 1999).

The induction program, in theory, should provide a community of learners with whom new teachers can interact with and learn from. Those with more experience are the mentors who not only help new teachers with professional tasks, but also get them acclimated to the work environment and develop problem-solving strategies. The after-school workshops and peer-observations, likewise, should provide new teachers with access to mentors whom they can interact with collegially. Lastly, the observation and evaluation process afford individualized opportunities for new teachers to receive feedback and expertise from administrators.

Part of learning in a community also entails adjusting to become active participants through "Legitimate Peripheral Participation" (LPP; Lave & Wenger, 1991, p. 29). Lave and Wenger define Legitimate Peripheral Participation as the means by which novices become seasoned professionals through observation and interactions with

experienced colleagues. Through the LPP metaphor, novices initially operate on the periphery of a community and move toward the center as they gain knowledge of tasks and vocabulary that are commonplace in the profession. Consequently, they are more adept when they start working fulltime.

While Lave and Wenger (1991) assert that Legitimate Peripheral Participation is an apprenticeship model in which novices learn the requisite skills before they start working, American schoolteachers do not have that luxury. Rather, they have a full class schedule, while at the same time pursuing learning endeavors. Thus, the current study espouses that Legitimate Peripheral Participation for new teachers occurs, even though they may be teaching fulltime.

Learning from High Attrition to Inform Induction

Creating Communities of Practice and thinking of novice teachers as being legitimate peripheral participants may be a helpful approach to support new teachers. With a large population of teachers over the age of 50 and a high rate of attrition among new teachers, there are obvious concerns that the teaching profession will experience a nationwide shortage (Ingersoll, Merrill, & May, 2014; Sutchter, et al., 2016). The literature from surveys to in-depth case studies, however, can inform us as to why new teachers are exiting the profession, and what can be done to support their retention.

According to the researchers, many people often cite low professional prestige and salary among the reasons that they do not want to become teachers (Boyd et al., 2011; Ingersoll, 2002; Inman & Marlow, 2004; King 1993). Indeed, the pay teachers earn seems to be a deterrent to entering the profession (Johnson, 2007), and an accelerant

to leaving it (Ingersoll, 2001). In 1994, for example, the median salary disparity between non-teachers and teachers with a Bachelor's degree was over \$11,000; just four years later, the gap had increased to over \$18,000 (Johnson, 2007). Currently, in 30 states a family of four on a teacher's salary would be eligible for government assistance. As an example, it is possible for a teacher's children to receive free or reduced priced lunch in school. Given the inability to lead even a middle-class life, it is likelier then that more college students will not consider the teaching profession, while teachers might contemplate leaving it. Calls to ameliorate poor teacher pay or create incentives to enter such as loan forgiveness have not been implemented by the federal or state governments. As a result, the status quo remains, with many students, particularly minority and economically disadvantaged students, suffering the most from high teacher attrition (Sutcher et al., 2016).

Although one may focus on recruitment as the primary strategy to prevent a teacher shortage, retention also plays a very important role in stabilizing the teacher workforce. As Sutcher et al. (2016) note, the current teacher attrition rate in the United States is 8%. This figure stands in stark contrast to teachers in Ontario, Canada, Singapore, and Finland schools, which are renowned internationally, and have attrition rates between 3 and 4% (Sutcher et al., 2016). Thus, the authors argue that cutting the American teacher attrition rate in half would effectively eliminate any shortage, while allowing for teachers to grow professionally and become more effective for students.

Unfortunately, once teachers enter the profession in the United States, they often lack support (Boyd et al., 2011; Fry, 2010; Ingersoll, 2002; Lloyd & Sullivan, 2012). Beginning the school year well requires teachers to be comfortable with the curriculum

they must teach and obtain the requisite supplies for their classes. However, many new teachers do not have adequate resources, particularly in high poverty schools (Johnson, 2007), nor do they know where to find them (Lloyd & Sullivan, 2012; Westervelt, 2016), which can lead to challenges with curriculum implementation. First-year elementary teachers, for example, spend on average over \$700 on classroom materials to try to compensate (Johnson, 2007).

At the same time, teachers contemplate leaving because they do not have enough direction and guidance with the curriculum (Mee & Haverback, 2014), or there is a lack of coherence between the materials and actual curriculum (Johnson, 2007). Hence, many teachers spend considerable time creating worksheets that align with the curriculum. While it may be more prudent for new teachers to receive a reduced teaching load (Valencic & Marentic, 2014), many are also assigned multiple classes to prepare for or more difficult classes (Buchanan, 2012; Johnson, 2007). Teachers who find themselves in such challenging positions are right to question whether their administrators, including principals, support them. Although principals have an excessive array of tasks to complete and find it difficult to extend themselves to new teachers, new teachers who lack support may end up getting frustrated and leave or change schools (Johnson, 2007). This seems to be the case in many urban schools that are plagued by higher turnover, which has led to a dearth of experienced master teachers to lean on for support.

Another challenge is that new teachers often feel solely responsible for handling classroom discipline issues; in the event that they report problems to administration, they fear being perceived as incompetent or being labeled as ineffective (Buchanan, 2012). They are confronted with a paradox in that they have to cultivate personal relationships

with students, while at the same time maintaining authority. Doing so is a tricky balance even for veteran teachers, who often face management issues in isolation. Steinberg (1996) asserts that one in three high school students admitted to horsing around to get through the school day; this creates a challenge for all teachers. The dilemma of public school teachers, therefore, is to effectively motivate and engage students so they have a positive attitude toward their education. An inability to manage a classroom effectively, furthermore, may lead to a sense of incompetency, which Gavish and Friedman (2010) assert can lead to burnout. It is no surprise, then, that new teachers easily grow weary; without their principals to support them, they may not last long in the classroom (Boyd et al., 2011; Inman & Marlow, 2010).

New teachers could potentially seek the help of veteran colleagues, but isolation pervades many school cultures (Dufour & Eaker, 1998), and remains the dominant work mode (Little, 1990). Tyack and Cuban (1995) discuss isolation as being part of the “grammar of schooling” (p. 85). Since the establishment of the graded school in the 1870s, teachers have been left alone to perform their duties in their classroom. While many reforms including topic driven cross-curricular courses following an eight-year study and the open classrooms movement from the 1960s, have made their way into schools, they have seemingly faded as most schools reverted back to core disciplinary classes taught in traditional formats. The result is that teachers have more curricular freedom, but they are increasingly isolated. Reformers often wonder why change is so difficult in education (Fullan, 2007). One explanation is that teachers are not collaborating enough or discussing issues of practice to effectively learn and change (Buchanan, 2012; Dufour & Eaker, 1998; Wilson & Berne, 1999). Initiatives, therefore,

have either dissipated or been haphazardly or ineffectively implemented (Tyack & Cuban, 1995).

Many schools have, furthermore, made futile attempts at getting teachers to collaborate. While it may be beneficial for teachers to discuss issues of practice, forcing conversations may add another host of problems. Hargreaves (1994) first coined the term “contrived collegiality” to denote meeting under inauthentic circumstances to discuss issues of practice (Datnow, 2011, p. 147). Such meetings are often regulated from the top-down by administrators and may lack the requisite buy-in from teachers to effectively function. Teachers may perceive the meetings as yet another requirement of their job, which may contribute to resentment and skepticism of future reform efforts. Furthermore, contrived collegiality may not lead to the intended goal of collegiality because teachers may be uncomfortable sharing their classroom practices. Authentic collaboration, on the other hand, takes time because it requires a cultural shift in which teachers move from being congenial to collegial with one another (Dana & Yendol-Hoppey, 2003). Some, including Dufour and Eaker (1998), assert that top-down efforts to stimulate teacher collaboration can work if teachers are divided into logical teams that appropriately meet within the confines of the schedule. Datnow (2011) additionally notes that the use of strict protocols for conversation may actually facilitate collaboration. However, for many new teachers who are working in school for the first time, the challenge of grading, planning, implementing lessons, and coming up with interventions for struggling learners, may be motivation to complete requisite tasks in isolation, forsaking collaboration.

Adding to teacher isolation are the increasing demands of teachers in the current era of standards and teacher accountability. Since the No Child Left Behind Act (2001) was enacted, many teachers not only have to perform well in classroom observations, but also demonstrate that their students are achieving proficiency on standardized tests, which has added an additional stressor for many in the profession. During the high stakes testing era in Texas, for example, the risk of leaving teaching was 24% higher than during the subsequent era when limits were placed on the number of testing hours within schools (Sass, Flores, Bustos, Claeys, & Perez, 2012). During the former, teachers were evaluated on the basis of student scores. Therefore, not only were they concerned about their regular classroom workload, but also narrowing the curriculum to focus more on standardized test skills. Moreover, the additional testing requirements came without any guidance for teachers to help improve student performance. They had to try more or less figure it out on their own. In addition to testing, other federal and state mandates have permeated schools. For example, in New Jersey the new teacher evaluation standards have burdened teachers with documenting that they are performing every facet of their job at or above expectation (Mooney, 2014). Unfortunately, policymakers have made no sacrifices to make room for the additional work that teachers are required to do (Reeves, 2009).

Overall, teacher turnover far exceeds the turnover in other professions (Ingersoll, 2002). While retirement accounts for only a small percentage of those who leave the profession, there are concerns about the number of novice teachers leaving. In fact, 90% of new hires serve as replacements for recently departed teachers who are not retiring (Ingersoll, 2002). The numbers are even more staggering in high-poverty and high-

minority districts, where qualified teachers are needed the most. In addition, as institutions of learning, it is a bit ironic that schools are not doing enough to support teacher learning. As it stands, many teachers operate in isolating circumstances where they are apt to learn little, while the demands of the profession have significantly increased.

Enhancing collegial relationships. Because teacher isolation is one of the primary reasons for the revolving door in education (Ingersoll, 2014; Little, 1982; Rosenholtz, 1989), it is imperative that schools do a better job of cultivating collegiality (Boyd et al., 2011; Buchanan et al., 2013; Fry, 2010; Ingersoll & Smith, 2004; Inman & Marlow, 2004; Lloyd & Sullivan, 2012; Merrill, 2006). In many cases, teachers find that they are in remote locations, have poor mentoring matches, or lack job-embedded opportunities to engage with colleagues. They are often generally cognizant of these challenging circumstances and consequently crave collegial relationships (Inman & Marlow, 2004; Merrill, 2006). Several seminal studies have alluded to strong correlations between collegiality, teacher development, and student achievement (Little, 1982; McLaughlin & Talbert, 1993; Rosenholtz, 1989). Hence, administrators would be sensible to heed teachers' requests for more support and opportunities to collaborate and learn from colleagues.

Little (1982) conducted a study in which she compared and contrasted successful with unsuccessful schools. Through a detailed ethnography, which included data from observations and interviews of district administrators, school administrators, and teachers, Little (1982) found that in successful schools teachers engaged more frequently in collegial conversations and shared technical expertise. Indeed, regular conversations

about practice proved to be a powerful form of professional development. Likewise, Rosenholtz (1989) looked at 72 Tennessee elementary schools in a mixed methods study using open-ended interviews and surveys to distinguish between learning enriched school cultures and learning deficient ones. Rosenholtz (1989) found that the schools with more student growth were ones in which teachers regularly collaborated with one another about teaching and learning. In addition, teachers who felt they had their colleagues' support had higher expectations for students and developed a stronger self-efficacy to meet the students' needs.

McLaughlin and Talbert (1993) examined the case of Oak Valley High School in California, which had both isolated and collaborative pockets among teachers. Because high schools are more departmentalized, the researchers compared the social studies and English departments. Teachers from both disciplines had the same relative experience, students, and administrators. However, their outlook was entirely different. While the English teachers regularly collaborated with one another on the curricular framework as it applied to the classroom, the social studies teachers were more isolated and performed below par in meeting state and local standards. Based on the survey evidence and subsequent interviews, the social studies teachers viewed students more unfavorably and had lower expectations. They also felt stagnant professionally and unsatisfied in their career choice. On the other hand, the English teachers discussed within the department how they were trying to improve in their craft, which resulted from collaborating on new innovations and pedagogical techniques. They also believed the students, whom the social studies teachers perceived to be inept, to be very capable, which affected the English teachers' disposition toward their everyday work.

Overall, collaboration and strong relationships served as a driving mechanism for the English teachers to grow and develop. Presumably, if new teachers were to take part in similar experiences collaborating with colleagues, they may develop more in their pedagogy. However, if their experiences were to mirror those of the social studies teachers, they may be at a higher risk for attrition (Ingersoll & Smith, 2004).

Analyzing Current Induction Programs

Unfortunately, most new teachers receive little guidance on curriculum matters (Cohen & Ball, 2009), even though they do not desire to work alone (Johnson, 2007). Rectifying isolation and attrition, nevertheless, should occur rather than recruiting the next generation of new teachers to replace those who leave. There should be a retention strategy to ensure that new teachers can become effective educators (Sutcher et al., 2016). Induction programs can help provide support by facilitating professional development opportunities for new teachers, who are often left to sink or swim (Wong et al., 2009). Johnson (2007) asserts that schools that provide quality induction, which are few and far between, are keepers.

Induction is contingent upon transforming teachers from novices to experts, while also increasing their self-efficacy. In the literature on novice and expert differences, various researchers found that novices tend to have difficulty adapting their lessons to student concerns and questions (Borko & Livingston, 1989; Feiman-Nemser, 2001; Wolff, Jarodzka, Boschuizen, & van den Bogert, 2015). As classroom managers, they often cannot predict student problems, and are unsure of how to intervene when problems occur. Experts, on the other hand, more readily connect problematic situations to prior experiences and adjust their instruction accordingly (Wolff et al., 2015). In comparing

three expert and three student teachers, Borko and Livingston (1989) also found that novices tend to rely more on short-term planning. Rather than considering students' needs, they are more focused on how to teach to the curriculum. But even then, they appear lost, having to rely on the textbook, other teachers' lesson plans, or a rigid curriculum guide. Overall, they do not have enough knowledge of classroom activity structures to apply to their planning and instruction. New teachers likewise struggle in other tasks that they are expected to do for the first time, including assessing students (Grainger & Adie, 2014). In the practice of working with graduate school peers, teacher candidates have a difficult time agreeing with one another on how to assess (Borko & Livingston, 1989). Thus, it can be inferred that teachers enter the classroom with only formative understandings of how students learn.

Fortunately, many teacher candidates have effective cooperating teachers to support them during the pre-service phase. However, when this support is withdrawn in the transition from student teaching to the first year of teaching, Hoy and Spero (2005) found that teachers' self-efficacy declined. The authors define self-efficacy as the teachers' perception of their competence. Unsurprisingly, veteran teachers tend to have higher self-efficacy. Therefore, it is likely that over a longer period of time, new teachers develop a repertoire of strategies and experiences to pull from that help to enhance their self-efficacy, or they leave the profession altogether. Participating in collaborative experiences and observations of peers can serve as interventions to augment self-efficacy, perhaps because these activities provide teachers with job-embedded professional development that is applicable to their classrooms (Hoy & Spero, 2005).

Important in devising an induction program, therefore, is including targeted interventions such as peer-observations to help boost new teachers' self-efficacy. The typical three administrative observations and reports are unlikely to be sufficient for new teachers to grow and thrive (Hoy & Spero, 2005); similarly, teachers who sit passively through workshops will probably not transfer learning to their practice (Darling-Hammond et al., 2009). On the contrary, new teachers require individualized, sustained opportunities for learning. As Johnson (2007) notes, a quality induction program is essentially job-embedded training. As per Situated Learning Theory, new teachers who are engaged in Legitimate Peripheral Participation require on the job training from experts.

While the National Commission on Teaching and America's future argues the new teachers should have a reduced teaching load and more training as a way to ease into rigors of the profession, many schools cannot afford such luxuries (Feiman-Nemser, 2001). Rather, principals have to focus on what they can control, which includes instilling a collaborative culture, providing formative and summative feedback, fostering professional relationships, providing assistance with classroom management, and orienting new teachers (Baker-Gardner, 2015; Carver, 2003). The latter task requires several years because teaching is a complex task that takes significant time for substantive improvement (Feiman-Nemser, 2001). However, although a multiyear induction program may include formative and summative feedback, mentoring, and university partnerships, these interventions may not necessarily ensure that teachers are well prepared to handle the complexity of teaching (Feiman-Nemser, 2001). Indeed, much of the interventions' efficacy depends on the context of their implementation.

Recognizing the challenges that new teachers face, many states have adopted induction standards for implementation in schools, beginning with Florida in 1978; other states began to follow suit. Wood and Stanulis (2009) assert that the first wave induction programs were disorganized, incoherent, and poorly funded. By the end of the 1980s, however there was much emphasis on mentoring, and by 2000, 80% of new teachers were participating in some form of induction, which had come to include more formative assessment of new teachers; many programs, however, were not renewed because of the cost of training. Currently, Wood and Stanulis (2009) assert that fourth wave induction programs are combining assistance and evaluation with sustained professional development activities. Yet, induction implementation still varies from school to school with some taking a more innovative approach.

Ingersoll and Smith (2004) assert that induction programs with more interventions have a much greater chance of retaining teachers. Drawing from a sociological and organizational perspective, they claim more collegial relationships can offset bad morale stemming from attrition. The researchers utilized the School and Staff Survey, and Teacher Follow-Up for the 1999-2000 school year, to gather feedback about the impact of the induction process. Questions included whether “a mentor was provided in the same subject area, the degree of helpfulness of the mentor, participation in a seminar or classes for beginning teachers, collaboration with other teachers on issues of instruction, regular communication with administrators, and a reduction in the number of preparations” (Ingersoll & Smith, 2004, p. 33). Multinomial regression analysis was utilized to determine whether any of these factors were particularly effective in reducing attrition. The findings predictably showed that teachers who received no support had a much

higher turnover rate of 40%, while teachers receiving any three supports had a turnover rate of 28% after one year. Teachers receiving eight induction supports had an even lower turnover rate of 18%. Overall, the study concluded that comprehensive induction programs are much more effective at retaining teachers. A limitation, however, was that the researchers did not look at other possible factors within the school environment that might have been effective at retaining teachers. Indeed, it was difficult to draw a causal relationship between the induction program and retention. Nevertheless, the study corroborates other research asserting that comprehensive induction helps to lower attrition (Fuller, 2003; Henke, Chen, & Geis, 2000; Kapadia, Coca & Easton, 2007)

In another study, Smith and Ingersoll (2004) attempted to look at the effects of specific induction activities at reducing attrition. Because of the increasing number of teachers who were participating in some form of induction professional development, the researchers wanted to examine whether collaborative professional development activities augmented teacher retention. Through regression analysis, they discovered that strong relations with mentors, regularly scheduled collaborative planning time, and regular communication with administrators were effective at reducing attrition. However, because induction programs often include bundled supports, it was impossible to isolate the collaborative activities that were the most effective. On the other hand, the researchers could conclude that collaborative support, in general, strengthened induction programs, which corresponds to the research on self-efficacy (Borko & Livingston, 1989; Wolff et al., 2015).

Despite evidence that bundled supports may help to retain more teachers, not all districts that implement them should anticipate a higher retention (Ingersoll & Strong,

2011). In an unpublished study, Ingersoll and Smith (2004b) found that comprehensive packages in high poverty districts were not effective at retaining teachers. The researchers controlled for a wide range of organizational factors including administrator quality, student discipline levels, and faculty input in decision-making. Unfortunately, despite whatever interventions may be in place, those teachers who work in the most challenging schools inevitably leave the profession or change jobs at a higher rate than those teaching in less difficult contexts.

Comprehensive induction programs. Researchers have also studied the emergence of comprehensive induction programs, which emphasize the creation of a strong learning environment to acclimate new teachers (Hammerness & Matsko, 2012; Legan & De Witt, 2001, Perry & Hayes, 2011). Common interventions include workshops, graduate courses, peer-observations, ongoing mentoring, and regular meetings with administrators. A shortcoming of the programs, however, is that they can be costly. For example, The Indiana Novice Teacher Project (2001) was estimated to cost \$1,828 per participant.

Additionally, the studies reported mixed results in retaining teachers. The Urban Teacher Education Program (UTEP), for example, reported a high retention rate (Hammerness & Matsko, 2012); approximately 70% of teachers stayed after five years, which is much higher than the national average of 50% (Ingersoll & Smith, 2004). Given that UTEP was designed to prepare teachers for an urban environment, it emphasized culturally responsive teaching. The Building an Excellent Start Teaching Program (BEST) also reported closing the gap in the retention rate between white and minority

teachers, but did not explicitly state what the actual rates were and whether the overall retention rate increased.

In Oklahoma, the Department of Career and Technology Education and local technology centers launched the Career Tech New Teacher Induction program, NTI, and reported that between 2000 and 2005, 82.6% of new teachers were retained (Sandford & Self, 2011). The premise behind NTI was to create teams composed of administrators, mentor teachers, and higher education partners. Each member of the team worked collaboratively with novices to ensure that they received technical assistance on pedagogical and content-related issues. Aside from the retention data, the researchers also used Likert scales to determine how well teachers were achieving benchmarks, surveys, and in-person interviews with administrators. As a disclaimer, administrators who participated were not responsible for the summative evaluation of new teachers, which perhaps played a role in creating an aura of trust and openness in team settings. According to the administrators, they were committed to the team, established open communication lines, provided formative opportunities for new teachers to receive feedback, and assisted in achieving organizational expectations and mandates. Mentor teachers, a university partnership, and ample observations, furthermore, helped to reduce the isolation that many first-year teachers experience. The team setting also held members more accountable for addressing new teachers' needs, as opposed to many one-to-one mentoring relationships. There were, however, several limitations. The program did not address teachers' needs beyond the first year, and new teachers were not consulted on their experiences within the program, which may have offered other

insights. Additionally, the authors did not offer any limitations of the program aside from the cost.

Ingersoll and Strong (2011) also reference two studies that claim that strong induction can positively affect student achievement. Thompson, Paek, Goe, and Ponte (2004) evaluated the California's Beginning Teacher Support and Assessment Program by surveying 287 teachers, at which point they classified the teachers into high, middle, and low levels of induction engagement. Afterward, they observed smaller groups of teachers, utilizing nine observational elements on teaching practice, and interviewed students about their teachers. The findings showed that teachers who participated in strong induction programs performed better in the instructional elements, although performance on only one of the elements was statistically significant. However, the data was suspect because it relied too much on younger students' opinions, and did not adequately explain each of the observational elements. As a result, it was difficult to claim that some teachers outperformed their peers in the classroom (Ingersoll & Strong, 2011).

After publishing four reports on new teacher development, The Mathematica Policy Associates, likewise, claimed that strong induction positively affects student learning (Glazerman et al., 2006; Glazerman et al., 2008; Glazerman, et al. 2010; Isenberg et al., 2009). Overall, 1009 beginning teachers in 418 schools in 17 urban, high-poverty districts participated. Unlike the other studies, the researchers utilized a randomized controlled trial design, which allowed them to make causal claims; the experimental group of teachers received comprehensive induction that included weekly meetings with a mentor, monthly professional development sessions, opportunities to

observe veteran colleagues, and formative feedback on teaching practices. The control group, meanwhile, received induction support with fewer interventions. Overall, the groups were balanced by gender, race, age, experience, grade level, and certification. The researchers followed the teachers for three years by conducting classroom observations, administering surveys, and collecting student achievement scores. While there was no difference in retention between the two groups, students who had teachers in their third year of the comprehensive induction program significantly outperformed peers on tests than those whose teachers were in the control group. However, a limitation of the study was that it was difficult to discern the differences between comprehensive and regular induction. In addition, there is more to children's education than test scores so there should be more holistic criteria to confirm the results.

Overall, the research on induction programs affirms that ongoing collaborative and comprehensive supports for new teachers can lead to higher retention, (Hammerness & Matsko, 2012; Ingersoll & Smith, 2004; Sandford & Self, 2011; Smith & Ingersoll, 2004), although this is not always the case for high-poverty districts (Ingersoll & Smith, 2004b). Furthermore, because there is an achievement gap between White and minority teachers regarding retention, it is important to note that there is not a one-size-fits all induction program (Hammerness & Matsko, 2012). Minority teachers may need different supports than White teachers; at the same time, novice educators should have an understanding of the cultural background of the students they teach. The strength of the research literature is that it tells us that collaborative interventions are effective for new teachers (Sandford & Self, 2011). However, it does not detail the supports that may be most effective, or how induction programs should differentiate based on the local context.

Moreover, while in theory induction should strengthen teaching and learning in the classroom, it is very difficult to prove empirically that it does so (Glazerman et al., 2010).

Evaluating Induction Professional Development Experiences

In building an effective induction program, practitioners may struggle to determine what supports to include. While the goal is to provide meaningful learning opportunities, administrators also do not want to overwhelm and hinder new teachers by inundating them with mandates that may detract from the teachers' responsibilities. Some research also indicates that an inconsistently administered induction program is worse than no induction program at all (LoCascio, et al., 2016). Therefore, the interventions that are in place must not only be adhered to with fidelity, but also take into account time considerations. While it difficult to empirically determine what interventions are well suited for a district (Smith & Ingersoll, 2004), this section will synthesize some best practices that are presented within the induction literature, including mentoring, job-embedded professional development opportunities, self-evaluation, and a cohort model.

Mentoring. In a mentoring model, an experienced teacher is responsible for guiding a novice colleague through the rigors of teaching. Perhaps because policymakers consider it to be the most imperative element of the induction process, mentoring is mandated by the New Jersey Department of Education for first-year teachers. Mentors are expected to meet with traditionally certified teachers at least once a week during the first four weeks of school, and periodically thereafter. For alternate-route teachers, mentor-mentee meetings should occur at least once a week for the first eight weeks of the school year (NJ Department of Education, 2014). Nevertheless, there is often little accountability in properly implementing the mentoring guidelines, nor any requirements

past the first year of teaching. In one study, nearly half of the teachers in a New Jersey school were not assigned a mentor in their first 20 days of teaching, which were perhaps the most essential to starting the year off well (LoCascio et al., 2016). The teachers noted that they wanted their mentors to be responsive, caring, accommodating, and trustful.

Indeed, if mentors do not take consistent time to collaborate with their mentees, then the mandated times for meeting become more of a monthly to-do, rather than a felt necessity (Bland, Church, & Luo, 2014). In various studies, new teachers have identified why quality mentoring is of critical importance (Abell et al., 1995; Buchanan et al., 2013; Jorissen, 2013; LoCascio et al., 2016; Paris, 2013). First, mentors help to expand teachers' knowledge base of strategies to effectively deliver instruction. Second, mentors can provide a plethora of resources to novice teachers who are new to teaching the curriculum. Third, mentors help problem-solve with mentees who are facing teaching related challenges for the first time in their career. Lastly, mentors provide formative feedback on lessons, assessments, and other materials developed by mentees. It is through these tasks that mentors engender responsiveness, trust, and care, while building confidence in their mentees (Locascio et al., 2016).

Johnson (2007) asserts that mentoring is most effective for teachers who work near their mentors, teach the same subject, and have common planning time. Unfortunately, in her study of 50 new teachers, she found that most did not receive quality mentoring. Feiman-Nemser (2001) maintains that there is a misconception that great teachers will make great mentors. In reality, mentors need extensive training on the varied levels of support they should provide. They must also provide quality professional development that centers on inquiry (Ball & Cohen, 1999). Discussions between mentors

and mentees, therefore, should focus on records of practice including student work, informal observation reports, and videotaped lessons. Moreover, new teachers should be mentored to take risks and experiment with strategies in the classroom to help expand their repertoire of skills. Subsequent discussions with mentors on experimentation should help to cultivate reflection on practice (Feiman-Nemser, 2001).

Yusko and Feiman-Nemser (2008) compared two promising mentoring models from the Cincinnati, Ohio and Santa Cruz, California induction programs. The authors gathered data qualitatively, interviewing leaders, collecting program documents, attending meetings, and shadowing mentors and mentees. In both cases, mentors were released full time from classroom instruction to work with novice teachers. In Cincinnati, 20 exemplary teachers worked with up to 14 teachers, where they were responsible for attending summer training, providing multiple forms of assistance, and conducting a minimum of six observations. Mentors and mentees thereafter met within five days' time to debrief. Furthermore, mentors had a say in their mentees' evaluation, and took their positions seriously to rid schools of bad teachers. In some cases, mentors would intervene during lessons if they perceived that events transpiring in the classroom were not going well.

Santa Cruz mentors, on the other hand, did not have a say in evaluation, and primarily worked with new teachers to provide formative feedback. They did not communicate about their work with administrators and maintained a code of silence so they could engender trustful relationships with new teachers. Utilizing the state teaching standards, mentors collaborated with their mentees to establish goals for the school year. Furthermore, unlike the Cincinnati mentors, they met with their mentees immediately

following observations (Yusko & Feiman-Nemser, 2008). Accordingly, mentors and mentees shared strong relationships that were more personal.

The authors contend, however, that the Santa Cruz mentors did not elicit as much change in new teachers because they were uninvolved in the evaluation process. In addition, the mentor teachers were more reluctant to confront novices on ineffective pedagogical practices (Yusko & Feiman-Nemser, 2008). Thus, the authors argue that mentors should not only provide formative assistance, but also evaluate novice teachers, a recommendation that contradicts prior research (Breaux & Wong, 2003). However, other than drawing their own conclusions from their qualitative research, Yusko and Feiman-Nemser (2008) do not reveal other pertinent data such as the retention rate within each program. Moreover, while having full-release mentors may significantly help to meet the needs of new teachers, it seems farfetched to think that many schools could afford such an intervention. Therefore, schools that are pressed financially should try to provide quality mentor training, and appropriately match mentors and mentees (Feiman-Nemser, 2001).

Job-embedded opportunities for collaboration. Although the onus is on mentors to help cultivate effective relationships with their mentees, administrators can facilitate this by providing space and time for interactions. If administrators restructure the day to allow for more collaborative time, new teachers stand to benefit from increased interactions with mentors and veteran teachers (Bland et al., 2014). In addition, by placing mentors and mentees in close proximity to one another, there is more of a chance for them to regularly communicate on issues of practice and have impromptu meetings (Buchanan et al., 2013). Similarly, mentors who share the same schedule and curriculum

as their mentees can utilize preparation periods to provide feedback to each other and co-plan.

While mentoring can serve as one form of job-embedded professional development, there are other ways to help teachers readily apply learning to the classroom. Another approach is peer-observations, in which administrators provide substitute coverage for novice teachers to observe master teachers. If peer-observations occur throughout the year, then new teachers can sustain their learning by seeing models of classroom instruction firsthand (Hudson, 2012). Such observations are more effective when the observer and observed discuss ahead of time what to look for, and follow up with a debriefing session on the lesson (Little, 2006). In countries including Germany, schools adopt more of an apprenticeship model by assigning teachers a limited workload in their first two years; in turn, the teachers have more time to observe their colleagues' instructional practices so they can learn strategies to effectively handle the rigors of teaching in their third year (Valencic & Marentic, 2014).

Another form of job-embedded professional development is a Critical Friends Group (CFG), which researchers unveiled in 1994 at the Annenberg Institute. CFGs, which rely on the use of protocols to structure professional conversations about teaching and learning, are intended for teachers to provide one another with feedback based on records of practice (Curry, 2008; Dunne, Nave, & Lewis, 2000; Silva, 2005). As an example, during a meeting, one teacher may bring a sample of student writing to seek assistance in identifying an appropriate intervention for a student. The protocol may include several rounds for clarifying questions, observations, inferences, and recommendations. For each round, members talk in order to eliminate power dynamics;

furthermore, the order of rounds helps to slow down thinking and delay judgment prior to rendering feedback, which contributes to more authentic collaboration (Curry, 2008; Datnow, 2011; Dunne et al., 2000). The recommendations should be immediately applicable to the classroom so the teacher can help to meet the needs of the student.

In one study of four first-year teachers in a Vietnamese school, Vo and Nguyen (2010) studied a Critical Friends framework, seeking feedback from teachers on their professional development experiences. The teachers met in their workgroup, in addition to observing each other. While their experiences were generally positive, the groups lacked master teachers' expertise to draw on. Also, there was not much information on how the researchers transcribed and collected the data. The results, moreover, indicated the obvious, that teachers had a positive experience participating in the groups. Nevertheless, the Critical Friends Group seemed very effective in getting the teachers to discuss their problems, and apply recommendations to their teaching. In many other schools, by contrast, one may find new teachers more isolated.

Self-assessment. Many more inductions programs and evaluation systems are also asking that teachers take part in self-assessment. In New Jersey, for example, teachers are rated on a continuum from ineffective to highly effective. Part of demonstrating their performance in relation to the teaching standards requires teachers to report what they have done throughout the course of a school year (Mooney, 2014). This can be done, for example, by creating a portfolio that is comprised of written work, lesson plans, student work, journals, parent-teachers logs, or other evidence documenting how a teacher has met the standards of the evaluation system and is growing in his/her craft (Brown & Wolfe-Quintero, 1997; Zepeda, 2002). In some cases, the portfolio

includes artifacts with memos as a supplement to written reflections. The portfolios can be used for various purposes including attaining employment, licensure, or professional development credit (Attinello, Lare, & Waters, 2006). Although the portfolio has become a mainstream practice in pre-service education, it has now made its way to the teaching profession as an additional opportunity to highlight one's accomplishments in the classroom and school community.

This work may not be readily apparent from observations or student test scores. While traditional supervision relied on snapshot observations to evaluate teachers for their year's work, the portfolio on the other hand, places the onus on teachers to proactively demonstrate that they are meeting or exceeding expectations (Andrejko, 1998; Zepeda, 2002). In this way, portfolios have not only garnered a reputation as an alternative assessment, but as a more authentic one that documents a year's worth of teaching. The additional data gives supervisors more to work with in order to write a comprehensive evaluation.

There is, however, some debate over the logistics of the portfolio. Teachers who are willing to go above and beyond the requirements may have a tendency to include everything within the portfolio. However, Brown and Wolfe-Quintero (1997) assert that teachers and administrators should emphasize quality over quantity. By including an overabundance of materials in a portfolio, teachers run the risk of spending an inordinate amount of time on the task, while alienating supervisors and peers by including irrelevant artifacts. In the same vein, Attinello, Lare, and Waters (2006) argue that there must be precise guidelines and evaluation standards to ensure that teachers understand what types of work to include. Overall a portfolio should address three questions: what is collected,

so what, and now what (Van Wageningen & Hibbard, 1998). In short, teachers should be able to explain the evidence of their teaching performance, analyze how the evidence connects to relevant standards of teaching and professional goals, and determine what to work on next based on the evidence.

The task of creating a portfolio allows teachers to develop professionally through ongoing reflection, goal-formation, and collaboration. Undergirding the design of the portfolio are Constructivist and Adult Learning theoretical models (Tolsby, 2002). The former describes how new experiences spiral and are added into one's existing framework of knowledge; the latter describes how learning cannot occur without active reflection. Pieced together, teachers learn and grow by actively reflecting on their experiences and adding new knowledge into their pedagogical framework.

The positive effects of the portfolio are not just based on theory, however. In various studies, teachers have reported that constructing a portfolio provides opportunities to identify strengths and weaknesses, which otherwise would not exist. Those who self-reported as reflective, documented how they reached their goals and addressed what areas they wanted to work on next (Attinello, et al., 2006; Stone, 1998). When meeting with administrators, such teachers were also much more adept at articulating how they met teaching standards. One principal pointed out how she did not really have to speak during evaluation conferences, discussing how the portfolio provides talking points for teachers (Zepeda, 2002). In this way, teachers become more metacognitive as they self-evaluate based on their work and experiences. They can then target professional development opportunities to attend based on their insights and goals (Zepeda, 2002).

When implemented properly, the portfolio can also enhance collegiality within a school community (Tolsby, 2002). Tolsby (2002) argues that the introduction of electronic portfolios not only allows all data and prompts to be compiled in one location, but also facilitates collaboration through the easy distribution of web content. The portfolio can foster dialogue amongst teachers and administrators, who commonly discuss how to successfully complete the requirements over a period of time.

In Andreiko's (1998) work, administrators formatively assessed teachers at the midpoint of the schoolyear to discuss how teachers were achieving their goals and what areas they were struggling in. In another school, teachers who volunteered to complete a portfolio were assigned a peer mentor of their choice. Mentors and administrators both underwent training to determine how best to support one another. In the end, those who participated, reported that they engaged in many more conversations about teaching with colleagues than they otherwise would have without the portfolio in place (Zebeda, 2002). Tolsby (2002) argues that this collaborative dialogue, in conjunction with active reflection, is the essence of taking part in a Community of Practice.

The portfolio, however, is not without its disadvantages, one of which is time constraints (Attinello, et al., 2006). Because teachers are inundated with activities outside of class such as lesson planning, grading, and attending meetings, finding a window of time during which to reflect on and construct a portfolio remains a challenge. As many schools consider implementation, teachers must see the portfolio as useful, rather than another thing to do if the process is to be effective (Stone, 1998). Because the portfolio is a long-term project, administrators and teachers must be sufficiently trained to determine how to successfully complete it by its due date. Hence, it is recommended

that they spend time discussing the portfolio in meetings throughout the year (Stone, 1998; Zepeda 2002). Without regular check-ins, teachers run the risk of having insufficient time to collect evidence and write authentic reflections. The result can be careless completion of the assignment, rendering it ineffective.

If administrators do not frame the portfolio process appropriately, it can also instill a competitive culture in a school, limiting collaboration. Indeed, many teachers see the portfolio as a showcasing in which they feel they have to outdo their colleagues (Attinell, Lare & Waters, 1998). As a result, an unintended consequence may be that they share less of their work to gain a competitive advantage. In one school where the portfolio was optional, the teachers not participating began to resent those who volunteered (Zepeda, 2002). Zepeda (2002) asserts that portfolio guidelines must be collectively created to avert any implementation mishaps.

Another shortcoming is the dearth of empirical evidence supporting the use of the portfolio (Zepeda, 2002). Based on the theoretical constructs, the portfolio indeed seems like an enlightened concept to promote reflection and dialogue, and transcend past snapshot observations. However, reflection in itself does not make teachers better (Zepeda, 2002). It is the quality of reflection and dialogue that allows them to grow. Without that quality, teachers are engaging in a futile task. In addition, as teachers take on portfolio work, more research is needed to confirm that it is indeed a quality alternative assessment for evaluation and a tool to enhance teacher retention.

Cohort model. Many comprehensive induction programs also include graduate coursework or professional development courses. During such sessions, new teachers often have opportunities to collaborate and articulate issues arising in their classrooms.

Because such members share in the experience of being new teachers, they often come to rely on each other for support (Abell et al., 1995; Jorissen, 2002). Such is the essence of a cohort model. While mentors provide the necessary expertise, new teachers may understand each other better because they encounter similar problems in the classroom.

Several studies have noted how important networking is in areas where teachers are in high demand (Darling-Hammond, Chung, and Frelow, 2002; Jorissen, 2002). In New York City, approximately a third of teachers are alternate-route or emergency certified. Through survey analysis, researchers found that traditionally educated teachers are more likely to take responsibility for student learning (Darling-Hammond, et al., 2002). At the same time, however, alternate route teachers who participate in a wide range of induction activities can help close the learning gap with their peers who go through formal pre-service programs. Such activities included weekly meetings with a cohort of new teachers, and regular collaboration with mentors. In one study, most alternate-route teachers identified the cohort meetings as the most significant professional development experience in their induction (Jorissen, 2002).

However, one must be careful with how classes are planned and implemented. Part of creating an induction program is offering meaningful professional development to new teachers. But, in many seminars, teachers sit and passively listen to presentations. The problem with such workshops, in particular those that occur only one time, is that they do not have a major impact on teaching and student learning (Darling-Hammond, et al., 2009; Garet et al., 2001). The point of the cohort model, therefore, is not to sit through lectures, but rather create an interactive environment for new teachers to share their practices and seek authentic feedback. Workshops have a place in induction, but the

topics covered should be sustained through other professional development opportunities such as peer coaching and mentoring (Fogarty & Pete, 2004).

Strengths and Weaknesses of the Literature

From the School and Staffing Survey and Teacher Follow-up Survey (National Center for Educational Statistics, 2012), it is evident that many new teachers are switching jobs or leaving the teaching profession altogether. However, the good news is that they have a much greater chance of remaining and even thriving if there is more support given to them during the induction process. A gap in the literature, however, is that there is no uniform model for induction. Because many programs are contextualized, the interventions within each one may vary. Some may value social justice issues, while others focus more on technical skill development through graduate coursework or workshops. Some programs are very expensive, and are therefore unrealistic for school districts to adopt. As a result, it is important to consider what interventions a school can effectively take on.

Nevertheless, one can still synthesize some best practices within the literature for new teacher development. Many induction programs include a strong mentoring component, job-embedded collaborative interventions, self-assessment, and a cohort model. A strong mentoring program is one in which mentors readily avail themselves to their mentees. By giving consistent formative feedback, providing pedagogical content expertise, and listening to teaching related challenges, mentors engender the trust of mentees. Administrators should also support new teachers by providing job-embedded collaborative opportunities, including regularly scheduled planning time with departmental colleagues and peer-observations. Furthermore, a key benefit of teachers

documenting their work is that it can lead to collegial conversations with peers. In a cohort group, meanwhile, teachers can lean on in each other for support, while learning more about teaching. One must ensure, though, that the interventions within the induction program provide quality professional development opportunities. The induction literature does not really delve into what quality professional development looks like. As a result, the possibility exists for school leaders to haphazardly implement induction programs, much to the detriment of new teachers.

Through induction, administrators must also consider how they want teachers to develop. One is left to wonder whether they prefer teachers who learn to cope with isolation and conduct their work alone in their classroom, or whether they want teachers who develop as leaders and take a vested interest in maintaining a strong learning community. Feiman-Nemser (2001) theorizes that post-induction teachers should be comfortable enough with their instruction to allow for peers to observe. These teachers should be open to collegial feedback, while taking on more of a role in school decision-making, faculty meetings, committees, and the home-school partnership. Perhaps most important, though, is that they help new teachers to learn the ropes and develop, which is the essence of engaging in a Community of Practice. With a quality induction program, this cycle of veteran teachers helping out novice peers can repeat, which allows newcomers to move from the periphery to the center of a community. This study, hence, evaluates whether the induction program makes experts accessible to novice teachers who are navigating through various challenges.

CHAPTER III

Methodology

Merriam (2009) asserts that there are three approaches to research: positivist, interpretative, and critical. While a positivist approach is utilized to prove or disprove a hypothesis through experimentations or surveys, interpretative research seeks to explain and understand human interactions and/or perspectives. Critical research, in contrast, is intended to question existing theories and knowledge, while examining the role of power in shaping experiences of stakeholders and participants. Given that the purpose of the current study is to conduct an evaluation of the new teacher induction program, I pursued an interpretative lens to the dynamics of the induction program through administrator perceptions, teacher perspectives, and interactions within the school. The research questions addressed were:

- How do the research participants describe the new teacher induction program?
- In what ways does the new teacher induction program help first, second, and third-year teachers address their challenges? Even with assistance, what challenges do new teachers face?
- What aspects of new teacher induction are perceived to be most effective?
What aspects are perceived to be less effective?

Overall, the act of interpreting lends itself to qualitative research. Glesne and Peshkin (1992) note that qualitative research is an umbrella term to “understand and interpret how the various participants in a social setting construct the world around them”

(p. 6). In this case, the setting that participants constructed meaning from is the school induction program. Patton (1985), furthermore, articulates that qualitative research is used to develop insights into the ways people think and behave, which are driven by their values, cultural norms, aspirations, and concerns. Indeed, the participants in the program, from those who organize it to those who participate in it, help to denote the induction program's efficacy.

While quantitative studies focus on scientific conclusions, qualitative research provides rich detail of behavior, perspective, and/or the context (Trochim & Donnelly, 2006). Qualitative research, moreover, is grounded in theory, focused on discovery, and applied to natural settings such as a school (Guba & Lincoln, 1981). In this case, Situated Learning Theory guided the research to determine whether new teachers are engaging in learning with expert colleagues. At the same time, the qualitative research led to the discovery of themes that reveal the nature of the induction program in sufficient detail.

Because the research focused on one suburban school's induction program, it was best to conduct a single case study analysis, rather than pursue another type of qualitative investigation. According to Merriam (2009), a case study is an "in depth description and analysis of a bounded system" (p. 40). Yin (2008) elaborates, stating that a case study is an "empirical inquiry that examines a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 18). Examples of case studies in educational settings may include classrooms, teachers, or even programs as the units of analysis (Miles & Huberman, 1994; Patton, 2001). The induction program was the bounded system where I examined

the development of new teachers in their first three years. As Merriam (2009) notes, “Case study has proven particularly useful for educational innovation, evaluating programs, and informing policy” (p. 51). Thus, the data allowed me thereafter to make recommendations for how best to support new teachers through ongoing professional development and efforts to build Communities of Practice in a multiyear induction program.

Gail, Borg, and Gail (1996) and Merriam (2009) offer several key advantages of case studies. First, they provide a meaningful way to understand a phenomenon within a context. Hence, if administrators want to research the intricacies of an induction program, they may consult case study literature. Second, case studies are most often applicable to real life scenarios such as the problems teachers may encounter in the classroom. Third, those who participate in real life situations, including teachers and administrators, provide insights into how to solve problems. Fourth, case studies can reveal substantive narratives based on participant accounts. Lastly, case studies contribute qualitative empirical data to the research base that may otherwise be devoid of rich detail.

There are, however, some limitations. While case studies provide more depth about phenomena occurring than quantitative research, it is important to note that one cannot generalize and draw valid causal conclusions from them. In addition, conducting case studies can be a cumbersome and laborious process, which can lead to problems articulating a thick analysis. Case studies also place much of the onus of interpretation on the researcher. Whereas quantitative findings are readily apparent, case study analysis requires rigorous examination of transcripts and documents. The researcher may

therefore have difficulty conveying the findings in a clear and concise manner to the audience. In many such studies, furthermore, the researcher is more likely to be biased given that he/she is involved in some capacity in the context of the bounded system. Consequently, despite the rich analysis, the findings of a case study must be corroborated and supplemented by other studies on the research topic (Guba & Lincoln, 1981; Merriam, 2009; Patton, 2001; Yin, 2008) in order to be valid.

Setting

The current case study was conducted at my worksite at a New Jersey suburban middle school (grades six to eight), which has approximately 1022 students. Although the statistics are not readily available, the teaching staff is predominantly White and female. Meanwhile, nearly 58% of the students are Asian, mostly of South Asian descent, while approximately 28% are White, 7.5% are Black, and 6% are Hispanic. In addition, 13% of students enrolled have classified disabilities, while 10.5% are economically disadvantaged as indicated by their eligibility for free or reduced-price lunch. Based on the 2015 PARCC language arts scores, 74% of students met or exceeded proficiency levels. The school outperformed 89% of all other middle schools in New Jersey, and 97% of middle schools with similar demographics. On the mathematics section, however, only 65% achieved or exceeded proficiency levels; there is no comparison data to other schools.

Because of the disparity in standardized test scores between the highest performing Asian subgroup and African-American students and students with learning disabilities, the school is labeled as a focus school by the NJ Department of Education. As a result, the Regional Assessment Center (RAC), a state agency, monitors the

language arts, mathematics, and special education curriculum. The RAC, furthermore, periodically sends representatives to conduct walkthrough observations in classroom settings.

On a regular day, core academic teachers in mathematics, science, social studies, literature, and writing instruct students for five 51-minute periods, and oversee an additional 20-minute period that can be used for further instruction or reading. Typically, one 45-minute period is designated for meetings. Several days a week, teams of core academic teachers meet during this period to plan activities for students or discuss struggling learners. On Thursdays, grade level teachers in the same content area meet to discuss common assessments, student-growth objectives, and lesson plans. Although the time is designated for collaboration, it may not be fully utilized if it is perceived that there is little to discuss. Core teachers also have an additional preparation period for individual planning and grading. At the same time, non-core (encore) teachers are typically more isolated in their practice with fewer meetings to attend to. In fact, world language teachers often have to travel to classrooms or buildings to teach, or are in trailers outside.

Induction. Administrators have tried to bolster the induction program by adding more supports. They perceive that teachers have the most to grow in classroom skills related to classroom management, formative assessment, differentiation, metacognitive reading, reflection. Thus, these are the topics that are covered in formal professional development during the year. In addition to these interventions, there are also structures and professional development in place to benefit all teachers. The purpose of this section

to provide of an overview of the induction program in its entirety, including all of the supports available for teachers.

- Upon being hired new teachers are required to attend summer training for four full days. The intent is for teachers to get acclimated to the school, network with other new teachers and administrators, and learn strategies from professional development workshops on valued practices such as formative assessment. Meanwhile, second-year teachers are required to attend summer orientation, albeit for fewer sessions than first-year teachers. Third year-teachers are only required to read *Teach Like a Champion* (2010) by Doug Lemov and facilitate a professional development presentation on it to first and second-year teachers. The book, in general, is packed with valued classroom practices in management, assessment, and planning.
- During the fall, all non-tenured teachers are also pulled from their classes for one school day to observe three veteran teachers. They are provided with a sheet to take notes on observable strategies such as management routines. Thereafter, at the end of the day, the new teachers meet with administrators to debrief as a group about what they learned.
- As part of the evaluation process, new teachers are subject to three formal observations, as well as various brief walkthroughs. Two of the formal evaluations are announced, while one is unannounced within a two-week window. Each observation is conducted by a different administrator so the administrative team can collaborate, discuss each teacher's potential, or plan and implement more individualized interventions to support a new teacher in need.

- First and second-year teachers, additionally, have monthly after school professional development workshops. Often times, the workshops serve as an overview or continuation of a topic. For example, differentiation training in the summer focused on providing teachers with ample strategies, while the differentiation after-school session required teachers to share ideas for how they were implementing the strategies.
- Three of these after-school sessions are devoted to completing the evaluative portfolio. The portfolio consists of prompts connected to each of the Stronge Evaluation Standards, including professional knowledge, instructional planning, instructional delivery, assessment of/for learning, learning environment, and professionalism (Stronge & Associates, 2012). It is generally perceived to be an overwhelming assignment that administrators value because of its emphasis on reflection and growth. The portfolio, furthermore, affords teachers a say in their evaluation.
- Core curriculum teachers in social studies, science, mathematics, language arts, and literature are members of unit teams. The teams are designed to discuss at-risk students or plan activities for a shared group of students. In theory, the workgroups can also serve to support teachers who are struggling with particular students.
- Core curriculum teachers have another departmental workgroup (CIPD) to meet with on Thursdays. CIPD teams are supposed to discuss curriculum planning, assessment, and pacing. They can also help new teachers to garner ideas for their classes.

- Teachers who are new to the profession or the district are additionally assigned a mentor, who is selected by the administrative team. All mentors have to go through a summer training session to review how to best support their mentees. Mentors then coordinate with their mentees, and thereafter meet as often as they see fit. Based on this autonomy, some mentoring relationships strengthen throughout the year, while others dissipate.
- All teachers are required to attend district professional development days. Some of the PD sessions focus on fulfilling the requirements of mandates such as student growth objectives. Others provide teachers with a choice in workshops to attend, time to determine how best to support students, or a means to discuss applicable academic skills with teachers who are a grade above or below.

Overall, with the available professional development opportunities, it is perceived that new teachers have various avenues to develop in their craft.

Sampling

To conduct the case study evaluation, I utilized purposeful sampling, a non-probability approach to forming a sample which typical of qualitative research, in which I selected participants who could best address the research questions (Creswell, 2009). Initially, I interviewed two administrators in January, 2017, the principal and Social Studies and Language Arts Supervisor, who were involved in the development and implementation of the induction program. From them, I hoped to garner sufficient detail about the rationale and purpose of each of the interventions in helping new teachers to develop.

Purposeful sampling, though, also entails identifying and selecting participants who experience a phenomenon of interest (Creswell & Plano-Clark, 2011), which in this case is being a new teacher. Because the induction program is designed to be a multi-year process, in which teachers are expected to progress, I sampled two first-year teachers, two second-year teachers, and two third-year teachers. I assumed that the experiences of second and third-year teachers would be different from first-year teachers in that the former had more insight into the induction program over a longer duration, while the latter were typically more focused on survival in the classroom. Overall, while I wanted to include more research participants, I had to limit the number so I could balance my professional responsibilities as a teacher in the school, which I go on to address later in the limitations section. Furthermore, Creswell (2013) recommends limiting the number of participants for in depth case studies to four or five, although I chose six to even out the number of first, second, and third-year teachers.

To determine the six teacher participants, I asked the two administrators to recommend individuals who are articulate and could provide information-rich feedback on the induction program. This was based on Patton (1990) explaining that the rationale behind purposeful sampling “lies in selecting information-rich cases...those from which one can learn a great deal about issues of central importance to the purpose of the research...” (p. 169). However, upon talking to administrators I found that the supervisor knew few teachers outside of language arts and social studies. Moreover, the principal did not seem concerned about who was included in the study, although he stated and emailed me a list of names. Therefore, as secondary criteria, I attempted to diversify the pool to include teachers of various subject areas.

Convenience also played a role in selecting participants. Because of my own teaching schedule as a teacher, it was easier for me to interview eighth grade teachers. Thus, three eighth grade teachers were included in the study, which allowed me to conduct interviews during my preparation time. The other interviews were conducted after school when I could sit down with interviewees who were not on the same schedule for at least 20 minutes. Overall, while convenience sampling helped facilitate the data collection process, a limitation is that it is often not representative of the general population. Therefore, such studies are more difficult to extrapolate information from (Creswell, 2013).

To elicit participation in this study, I emailed the teachers to explicate the project as part of my doctoral work, including the approval from administration (Appendix A). All agreed, and upon receiving their confirmation, I then approached the teachers with the informed consent form and audiotape addendum (Appendix B). Thereafter, I responded to any questions that they may have had. The participants had assurances that I would keep their responses confidential. According to the Rutgers University Institutional Review Board, confidential means that there is some linkage between the participants' identity and the responses in the research, although the respondents' names were changed in the research and final write-up. In keeping with a case study design, the findings were presented to describe the experiences of the group of teachers so they were not linked to only one participant. On the next page is a brief description of each participant, followed by a summary table.

Jim. Jim has been the principal of the middle school for the last seven years. Prior to his appointment, he served as a principal of an elementary school in the district, and vice principal at the other middle school.

Debbie. Debbie has served as the middle school supervisor for language arts and social studies for the past four years. Prior to that, she worked as a basic skills teacher in language arts at the elementary level.

Caroline. Caroline began as a student teacher in the other middle school in the district. In the year following her practicum, she completed a leave replacement in another district, and came back this year to work in another leave replacement position where she has taught literature to eighth grade students. She is also in the process of completing her Master's Degree in Education.

Helen. Helen started teaching in the school in November, but had a year of experience in a neighboring school district. As a special education educator, she teaches four pullout literature and writing classes, and one separate inclusion literature class with a general education teacher. Usually, pullout classes have fewer than 10 students who are all classified, while inclusion classes have over 20 classified and general education students.

Michael. As a second-year social studies teacher, Michael instructs sixth grade students in ancient history. He graduated from a nearby university, where he completed his Bachelor's and Master's in Education.

Jeremy. Jeremy, who is also in his second year, is a mathematics special education teacher. Prior to coming to the district, Jeremy taught in a private school.

While his content expertise is in mathematics, he also teaches an English class. Overall, he teaches two inclusion pre-algebra classes with the same general education teacher. He also has two pullout mathematics classes, and one inclusion writing course with a language arts teacher.

Daria. Daria is an English teacher in her third year in the district. Unlike the other teachers, her assignment has changed each year. Initially she taught in the other middle school in a replacement writing position in seventh grade. The following year, she switched schools and taught sixth grade literature. This year, she teaches sixth grade writing.

Maria. Maria, who is also in her third year, teaches eighth grade literature. She had previously completed her student teaching in sixth grade in the other middle school, and moved to an eighth grade replacement position. Eventually, the following year she obtained a tenure-track position.

Data Collection Procedures

Based on Lave and Wenger's (1991) Situated Learning Theory metaphor, new teachers start out at the periphery of the school environment and move toward the center to become full members of Communities of Practices. Making the change cannot happen overnight, especially if participants are used to being independent or are reluctant to make their practice public. But, in theory, through induction, new teachers should have opportunities to engage in learning topics, interact with colleagues, and collaborate on issues of practices. The result should be swifter development through Legitimate

Table 1***Research Participants***

Name	Year in the District	Other Pertinent Experience	Content Area
Jim	13	Elementary Principal and Vice Principal of the other Middle School	Leadership
Debbie	26	Over 20 years of Language Arts Teaching Experience	Language Arts, Leadership
Caroline	First	Teaching Experience in a Neighboring District	Literature
Helen	First	Student Teaching Experience in the District	Special Education Language Arts
Michael	Second	None	Social Studies
Jeremy	Second	Teaching Experience in a Private School	Special Education Math and Language Arts
Daria	Third	None	Writing and Literature
Maria	Third	Student Teaching Experience in the District	Literature

Peripheral Participation that helps novice educators to hone in on the skills necessary to survive the classroom and work environment. How Situated Learning Theory is playing out in the middle school induction program was determined through data collection from multiple sources including interview transcripts, field notes, survey results, direct observation, one-legged interview transcripts, and artifacts. All of the data sources are

qualitative, with the exception of the surveys sent out to first, second, and third-year teachers to determine general findings about the program.

The reason for including a variety of data sources is that a case study analysis should not rely solely on one form of data. Yin (2009) argues that case studies should have “distinctive situations” and “many more variables” that converge and triangulate (p. 18). Furthermore, the mixed-methods approach is particularly appealing because the qualitative data can supplement, reinterpret, or substantiate the quantitative data (Miles & Huberman, 1994).

Semi-structured interviews. My first step was to conduct semi-structured interviews, or what Dexter (1970) claims to be purposeful discussions (Merriam, 2009). Nearly all qualitative studies incorporate some form of interviewing (Merriam, 2009), which is appealing because it can lead to a focused discussion on the relevant research issues. Semi-structured interviews allow the researcher more freedom to ask probing questions to gather more data on the subject; however, a limitation of them is that the researcher may spend too much time on one topic and insufficient time on the others because of time constraints (Creswell, 2013). Semi-structured interviews also are more difficult to compare because the interview data may be very divergent (Patton, 2001). However, in this particular case, I chose to utilize them because I wanted the interview to have structure, but feel more conversational. I also wanted the freedom to ask follow-up questions that deviate from the protocol. I recorded the interviews using the app Rev on my iPhone, and subsequently uploaded the data to a Google Drive folder after using Rev’s transcription service.

As a researcher, I attempted to remain neutral in my questioning to get as much detail from the participants as possible that was pertinent to the research questions (Demarrais, 2004). To accomplish this goal, I developed several semi-structured protocols, including one for the two administrators in January (Appendix C), one for first-year teachers in February (Appendix D), one for second-year teachers in February (Appendix E), and one for third-year teachers in February (Appendix F).

Thereafter, as a final data collection source, I conducted a second set of interviews with first, second, and third-year teachers. I developed the protocols for the second set of interviews after combing through the initial research data. The follow-up interviews probed on specifics from the first interview, reflecting any updates from the initial supports in the induction program, as well as feedback on later interventions. They occurred in May and June, and lasted from 15 to 40 minutes.

Field notes. In addition to interview data, I also wrote field notes for each of the interviews. Merriam (2009) states that an “observation is the best technique to use when an activity, event, or situation can be observed firsthand, when a fresh perspective is desired, or when participants are not able or willing to discuss the topic of study” (p. 119). Indeed, there are some aspects of a setting that cannot be captured through audio and are only observable. Body language is one. In the interviews, the participants may have felt uncomfortable with specific questions. This discomfort cannot be discerned from listening to recordings. Therefore, I filled out observation protocols immediately following each interview to write down any pertinent notes about participant behavior (Appendix G). I also included sections for the location of the interview and a brief reflection. By embedding these three parts, I hoped to include the “physical setting,

participants, activities and interactions, conversation, subtle factors, and my own behavior,” as per Merriam’s (2009) recommendations (p. 121).

Artifacts. If specifics came up within the interview related to documents, I asked the teachers or administrators to provide them as samples of evidence. For example, the first and second-year workshop schedules were each useful to determine what professional learning topics the district valued. Such documents, according to Merriam (2009), are a “ready made source of data easily accessible to the imaginative and resourceful investigator” (p. 139). The artifacts are, furthermore, useful because the participants crafted them meticulously in their own words. As a result, one may have gotten a lens into the development and usefulness of the program.

Observations. In addition, I conducted a qualitative observation. Creswell (2013) defines qualitative observations as those in which the researcher takes diligent notes on the behavior and interactions at the research site. For one of the after school professional development sessions in March, I took copious notes about what occurred during the meeting, including the interactions and subtle behaviors exhibited by the facilitator and participants. As noted by Merriam (2009), observation must be driven by the research including the theoretical framework, purpose, and research questions. Therefore, after note-taking, I filled out a protocol utilizing what information I had to investigate the extent to which the after-school session allowed for expert and novice interactions (Appendix H). I also looked at whether the session constituted high quality professional development in that it was relevant to practice, arose from problems occurring in the classroom, and involved teachers through active engagement as opposed to a lecture (Darling-Hammond et al. 2009; Garet et al. 2001; Wilson & Berne, 1999).

Because the session occurred in a classroom in March, I sat at a distance from the group. In this way, I minimized disruptions so I could focus on what was occurring. Merriam (2009) denotes this role as a “complete observer”-someone who is hidden or is in a public setting (p. 125). A limitation of performing such an observation, however, is that I am not an experienced observer, and am unsure if my presence distracted the facilitator or participants. Additionally, I faced problems most novice observers encounter, including difficulty concentrating, distinguishing subtle factors, and picking out the salient points. To circumvent such issues, as per Merriam’s (2009) recommendations, I incorporated a simple, but explicit protocol form to sketch the physical setting, write down the number of participants, explain the activities, describe the conversations, look for subtle behavioral factors, and critically observe my own behavior. Unfortunately, by sitting at a distance, I found it difficult to discern participants’ body language.

One-legged interviews. One month after the professional development session ended, I conducted one-legged interviews with the first and second-year teachers who attended. Hall and Hord (2006) suggest that one-legged interviews are a convenient way to gather data. The interviews are concise, informal conversations that can last fewer than ten minutes. The purpose of these particular interviews was to gather feedback on the professional development sessions. I asked the following questions:

- What if anything did you learn?
- How are you utilizing the learning?
- Did the course help at all with any problems you may be experiencing?
- What improvements would you make to the course?

The ensuing data, which I transcribed and added to other interview documents, helped corroborate, supplement, or dispel whatever I found to occur during the observations.

Surveys. Prior to conducting the last set of semi-structured interviews, I emailed an anonymous survey to all first, second, and third-year teachers in April through Google Drive. The email stated that the survey should not take longer than five minutes. Each one was tailored to the particular year teaching of the participant, and included close-ended response questions about the interventions in the induction program. Teachers had to rate each support as not useful, slightly useful, somewhat useful, useful, or highly useful to their development in the classroom (Appendix I). There was also one open-ended response that asked teachers what was most useful to their development in fulfilling job requirements such as curriculum planning and behavioral management.

The benefit of utilizing the survey is that it included a more reliable sample to generalize from about the induction program. Between both middle schools in the district, which have a shared induction program, five of nine first-year teachers, seven of nine second-year teachers, and four of five third-year teachers responded. Moreover, the survey results helped indicate what specifics to inquire about in the subsequent semi-structured interviews. For example, for third-year teachers, I probed about what made district professional development days useful. A disadvantage of the survey, however, is that the results are not detailed enough to extract meaningful analysis for a case study. In addition, the survey included teachers who work at the other middle school, and could feasibly face different circumstances. Hence, because of the limitations, the survey functioned as a supplement to the other data sources.

Overall, given that the case study is bound by the current school year, the data collection phase occurred over the course of five months from January/2017 through June/2017. The use of semi-structured interviews, artifacts, observations, one-legged interviews, and a survey were intended to address the research questions and develop an in-depth case study. On the next page is a table explicitly mapping out the timeline, data sources, and pertinent research question(s) for each data source.

Data Analysis

Merriam (2009) asserts that qualitative data analysis is the “process of making meaning” (p. 176), although winnowing down the data and interpreting it can be arduous. Creswell (2013) recommends six steps, including organizing and preparing the data; reading and looking at the data; coding; utilizing the codes to describe the setting, people, or themes; determining how the description and themes will be utilized in the qualitative narrative; and interpreting the data set to determine findings. The process, while challenging, engages the researcher in analysis and reanalysis to adequately justify conclusions. Each of the steps is explained and elaborated on as it relates to the current study.

Organizing and preparing the data. Initially, after uploading all recordings, artifacts, and protocol documents into a Google Drive folder, I utilized Rev to transcribe most of the recordings from the interviews, while completing the shorter ones on my own. Each interview and document was labeled accordingly; for example, for the first round of interviews, I saved every transcribed work with the interviewee’s first name, followed by 1. For the second round of interviews, each document was saved as the

Table 2*Data Source, Completion, and Research Questions Addressed*

Data Source	Completion	Research Question(s) Addressed
Semi-Structured Interviews (Admin)	January/2017	<ol style="list-style-type: none"> 1. How do the research participants describe the new teacher induction program? 2. In what ways does the new teacher induction program help first, second, and third-year teachers address their challenges? Even with assistance, what challenges do new teachers face? 3. What aspects of new teacher induction are perceived to be most effective? What aspects are perceived to be less effective?
Semi-Structured Interviews (Teachers)	January-February/2017	All
Artifacts	June/2017	<ol style="list-style-type: none"> 1. How do the research participants describe the new teacher induction program? 2. In what ways does the new teacher induction program help first, second, and third-year teachers to address their challenges?
Observation	March/2017	<ol style="list-style-type: none"> 2. In what ways does the new teacher induction program help first, second, and third-year teachers to address their challenges?
One-legged interviews	April/2017	All
Semi-structured interviews (Teachers)	May-June/2017	All

participant's first name, followed by 2. In addition, I labeled observations, artifacts, and field notes separately in a Google Drive folder, which collectively served as the case

study database (Yin, 2008). As a result, I was able to access each data source at my own convenience.

Reading and looking at the data. The second step was to read and reread the data, which helped me to better understand the context of what participants said in the interviews, or how they behaved. It also provided me with a general sense of the data to facilitate with pattern detection. Patton (2002) maintains that the researcher should actually go beyond reading by annotating the text multiple times to begin to find themes. Some term this memoing (Saldana, 2015), or open coding (Merriam, 2009).

Thus, as I started reading, I began to annotate the text in the margins using the comment feature on Google Drive. After reviewing my comments, I annotated to summarize and at times abridge the text, draw my attention to a particular point, or write a note to myself to probe the participant further in the follow-up interview. For example, one of the teachers elaborated that he felt lost in the beginning of the year because he missed new teacher training. As a result, I temporarily coded the excerpt *benefits of summer training*.

Coding the data. As I made comments in the margins of the text, I entered into the preliminary stages of coding. Creswell (2013) states that “coding is the process of organizing the data by bracketing chunks...and writing a category in the margins” (p. 198). In short, dissecting text and labeling it, “while keeping the relations between the parts intact, is the stuff of analysis” (Miles & Huberman, 1994, p. 56). While I analyzed the data to determine what some of the codes were, I also inductively developed provisional codes. The inductive codes came from research questions, knowledge of the induction program, and theory. For example, peer-observations, after-school workshops,

and summer training all serves as codes to compile relevant information on each induction support. Likewise, challenges of being a new teacher was a code that was induced from one of the research questions, while expert-novice interactions were another code to signify Legitimate Peripheral Participation.

The remainder of the codes I determined deductively, many of which still pertained to the research questions and theory. For example, two themes that came about unintentionally through interview discussion were knowledge of procedures and relevance. After combing through the evidence, I decided to include these codes because they were important to the narrative that addressed the research questions. In some cases, some of the interview transcript data fit under multiple codes. Rather than selecting the best code to utilize, I incorporated the evidence under both categories. Overall, I revised the codes again and again as I continued to delve into the research findings (Merriam, 2009).

While Creswell (2013) recommends using a data software program such as Dedoose because hand-coding is a tedious process, I believe that hand-coding betters my interpretation skills by ensuring a more thorough reading and rereading of the text. As a result, I began by annotating the data in the margins of each Google Drive Document. By perusing and coding the sources multiple times, I tried to detect patterns, revisiting the research questions and theory to determine the categories. As Saldana (2015) notes, “Coding is not just labeling, it is linking” (p. 8). Thus, through constant comparative method (Glaser, 1965), I attempted to ensure consistency as themes arose by comparing and contrasting each data source. Determining my final set of codes occurred by reading

over my annotated comments, and forming connections between them. In some cases, I eliminated some of the comments, while linking the others.

Utilizing the codes to describe the setting and participants. After developing a tentative set of codes, I began to summarize the data through the process of pattern coding (Miles & Huberman, 1994). As the central ideas began to emerge through the analysis, I winnowed the data into general concepts. Pattern coding allows for such segmentation by organizing the data into groupings such as themes, causes, and relationships among people.

Initially, I took key quotes from each transcript and copied and pasted them into a spreadsheet, which I organized by tabs for administrators, first-year teachers, second-year teachers, and third-year teachers. Thereafter, I created a new document and copied and pasted quotes under applicable codes and categories. By reviewing the categories and questions, and outlining them visually, I illuminated connections. Once the links became more apparent, I wrote a description of the setting and participants, which eventually led to the development of a narrative that connected to the research questions.

Determining how the codes and themes were utilized in the narrative. The coding and subsequent themes, which are constructed through the data analysis, should begin to illustrate patterns that help to tell a cohesive narrative of the induction program. By this point, I grouped the data by category in a comprehensive document. I took it a step further by utilizing the connections between the groupings to develop a theoretical or logical framework that attempted to explain the data. Part of composing a narrative also entails sequencing events correctly, while highlighting the themes (Merriam, 2009).

Once I developed a preliminary narrative, I eliminated parts of the description of the setting and participants that seemed irrelevant.

Determining findings. Lastly, I utilized the narrative to adequately address the research questions. Some contend that determining findings is actually an additional step of analysis. Merriam (2009) articulates, “Researchers extend analysis to developing categories, themes, or other taxonomic classes that interpret the meaning of the data. The categories become the findings of the study” (p. 193). Overall, I grouped the findings by research question. Moreover, each finding was substantiated by evidence from various data sources, which researchers term triangulation (Merriam, 2009). One of the main challenges of the research process was moving the data from categories to bits that connected to the research questions.

Furthermore, ensuring that the findings held true across more than one data source and/or individual also took significant time. Merriam (2009) argues that much of case study analysis is just like other qualitative analysis, except the process of triangulation may pose difficulties navigating through a variety of sources. Up until the final write up, therefore, I checked and rechecked the data across sources. The findings, hence, are conveyed in a rich and holistic manner to fulfill the requirements of an in-depth case study (Merriam, 2009).

Survey Analysis

The one data source that is quantitative in nature is the survey, which consisted of close-ended response questions for each of the induction interventions, with the exception of one open-ended question. First-year, second-year, and third-year teachers each

received their own respective survey. Thereafter, I analyzed the results of each intervention using the *Summary of Results* tool in Google Drive. Overall, the survey helped inform the questions for the second semi-structured interview with teachers. Additionally, it was used to confirm, supplement, or dispel some of the themes that emerged from the qualitative research by eliciting feedback from a more generalizable sample. Thus, for example, if the teachers I interviewed found particular interventions to be useful, but the survey results revealed that most teachers did not agree, then I would have to eliminate that finding. In short, the quantitative data served as an instrument that garnered close consideration along with the qualitative data to uncover a chain of evidence. In this way, it served as a tool for concurrent triangulation (Tashakkori & Teddlie, 2003).

While adding in another data source can pose additional challenges in analysis, it helped me to circumvent some of the limitations of qualitative and quantitative research. For example, some assert that quantitative research does not provide enough rich analysis, while critics of qualitative research suggest it has limited applicability to other settings (Creswell, 2013). In this case study, the mixed methods helped me to generalize for the school induction program, while at the same time allowing me to articulate a thick description; this is particularly true because some of the participants I chose based on convenience. However, it is important to note that the survey alone will still not make the research study more generalizable to other schools because the sample size is not large enough. Furthermore, each school has a unique context that differs from the one I work at.

Researcher Position

Because I worked in the district for seven years, I admittedly had some biases about the program. Much of my opinion was shaped by own experiences as a new teacher. I had a mentor who was very helpful, but who also worked on a different schedule than me, which created barriers to meeting. At the same time, I did not really have a teacher workgroup who I could go to for curriculum concerns. I did, however, have a team of teachers that I could lean on for support with behavioral management. I also had an administrative team that I perceived to be attentive to the quality of teaching in my classroom that would provide formative and evaluative feedback. Like many other teachers, I struggled in my first-year, which caused me to be more considerate of new colleagues who started teaching after me. I was optimistic that there had to be a better way to optimize support in curriculum, management, assessment, and other teaching related areas. As I result, I may have been more critical of the program than I anticipated.

Validity and Reliability

To circumvent such predispositions, I tried to ensure validity utilizing several methods, as per Creswell's (2013) recommendations. Firstly, I utilized peer debriefing to receive feedback on my work so I did not interpret the results alone; I also showed my preliminary work to the teachers I interviewed, my administrators, as well as my peers in my dissertation group. By consulting with colleagues, I ensured that there was not a gap between what's apparent in the data and my own interpretations. Secondly, I provided rich descriptions so that there was enough detail to legitimize the findings. By providing more evidence, my claims had less of chance of being called into question. Thirdly, by using multiple data sources, I hoped to triangulate the findings into a coherent narrative.

Rather than randomly picking out quotes, I ensured that a finding held true across at least two teachers and/or two data sources. Lastly, I created a limitations section to acknowledge shortcomings in the data collection or interpretation phase.

CHAPTER IV

Findings

The current study sought to examine the experiences of first, second, and third-year teachers in a multi-year induction program. Teacher induction, which has become widespread since the 1990s, provides support to address the needs of new teachers (Ingersoll & Smtih, 2004; Wong, Britton & Ganser, 2005). While in the literature it is noted that comprehensive programs alleviate attrition, it is difficult to isolate what interventions are most effective, given that implementation varies by context. Thus, the purpose of this study was to look more closely at a revamped induction program within my school, and illuminate how it has helped new teachers to cope with the challenges of the profession, while facilitating their improvement. The research questions included:

- How do the research participants describe the new teacher induction program?
- In what ways does the new teacher induction program help first, second, and third-year teachers address their challenges? Even with assistance, what challenges do new teachers face?
- What aspects of new teacher induction are perceived to be most effective?
What aspects are perceived to be less effective?

The results from the study are organized according to each research question.

In addition, the findings are explained in relation to Lave and Wenger's (1991) Legitimate Peripheral Participation. Because it is perceived that teachers learn best when they interact with, collaborate, and observe expert teachers and administrators, the study

considered the facilitators and barriers to receiving assistance, particularly when it came to addressing classroom challenges. Mentoring matches, scheduling, and teaching assignment, for example, were considered as factors for getting help.

How do the Research Participants Describe the New Teacher Induction Program?

To understand the new teacher induction program in more depth, including the design and logic model, I interviewed my supervisor and principal. I also consulted with teachers on their perspective of what it is like being new to the school, utilizing the responses to expand upon the administrator interviews to develop a sense of the induction program. For validity and reliability, I corroborated the interview data across more than one source and/or one person to adequately determine any finding.

Design of the program. The administrators who designed the induction program indicated that induction is not necessarily the cure for attrition, especially because there are so many factors that have an effect such as hiring. As one administrator noted, it is important to get the right people to take part in the induction program:

Because we've been told time and time again and it's so true that one of the most important aspects of any administrative job is hiring good people and helping them to be successful. Because I'll be long gone, but whomever I've hired will still be here teaching students. And I want to leave whenever I leave. I want to leave knowing that I hired someone that's really doing a good job for those students.

Indeed, administrators look for talented candidates, which is easier for subject areas such as language arts and social studies. Filling special education, mathematics and science positions, by contrast, is more challenging because the supply of teachers is scarcer, especially at the end of the summer or for leave replacement positions. Overall, there are several criteria that are used for hiring:

I begin to look through Applitrack, and I pull out a number of candidates that I think qualify for that position and umm meet the criteria. You know they have to be highly qualified in their subject and certainly have the certifications that they need...the Praxis Scores, they need those. I look to see if they have references. I just also want to see how they've written their resume and particularly their cover letter to make sure that it's written well and appropriately. And I also look to see that it's addressed specifically to the director of Human Resources or the principal, that they've taken the time to really find out who that might be. And then oftentimes I do a phone interview... I look at their transcripts.

If time permits, there may be two interviews, followed by a demonstration lesson, at which point the administrative team convenes and makes an offer to a qualified candidate. In hiring the right people, the administrators are generally more confident that with reasonable induction support, the teachers can develop as strong professionals, although there are exceptions.

Equally important to hiring, though, is the evaluation of candidates over the course of their non-tenured experience, which is now four-years. Even with the changes to the evaluation system that came from a state mandate, *AchieveNJ*, administrators intimated that with tenure, a teacher most likely has a contract for life, unless he/she commits an egregious offense. Thus, not only do administrators proceed with caution when determining whether to grant tenure, but they also regularly discuss each non-tenured teacher at monthly meetings. One administrator indicated:

So these are big decisions we're making in terms of moving folks to tenure, we want to feel we want to feel a sense of like yeah I don't want to be like hawking people and being on their shoulder.... But you still want to keep a close eye on them to be sure that... And I think we have a pretty strong process here where we have our non-tenure review where we gather as a leadership team, as well our school district board office, folks who watch over teachers as well. And, we have a really honest conversation about each non-tenured teacher, year one through four... There's an opportunity to exchange some questions some challenging and it may result in us walking away from that table saying, you know we really haven't solidified our decision right now where we are with this person, how

about we do some more observations on him or her and come go back to the drawing board in two weeks to get a sense of where we are.

Aside from the hiring and evaluation process, new teachers must participate in the “cohort experience,” which includes summer training, portfolio workshops, the completion of reflective portfolio, one day of peer-observations, and mentoring. In addition, first and second-year teachers must attend after-school workshops. There are also other general initiatives to spur teacher growth including district professional development days, weekly common planning time for grade level departmental colleagues, monthly department meetings, and team meetings for teachers who primarily share the same group of students. Administrators, furthermore, provide formative and evaluative feedback for improvement through three general observations and walkthroughs. Through a robust support system, it is perceived that teachers have an opportunity to build upon their repertoire to become more effective for students.

From the administrators’ vantage point, the induction program is successful because of the quantity of professional development offered and its reflection in the classroom. One administrator stated, “You do see remnants of what was provided to them... It is encouraging to see people are trying to implement things whether it’s the interactive student notebook, whether it’s some cooperative learning approaches.” The interactive student notebook and cooperative learning approaches are both required workshops during summer training.

Another element of the induction process is the sustainment of topics for professional development. After examining the documents listing the professional development workshops, and discussing the program with administrators, it is apparent

that the school expects teachers to make improvements in various facets of teaching such as literacy instruction, formative assessment, and differentiation. For example, because of the inclusion of multiple Reading Apprenticeship workshops in the summer and during the school year, teachers are expected to develop the skills necessary to teach reading and writing, regardless of whether they are formally trained in language arts education. Likewise, by learning about formative assessment strategies and applying them in the classroom, teachers can utilize “a cadre of evidence” to determine the extent to which students are learning. Moreover, the sustainment of topics also allows teacher participants to digest material over an extended period of time.

Teacher perceptions. While administrators claim that they look for evidence of learning from the workshops during walkthroughs and observations, most teachers did not feel an overwhelming sense of pressure to utilize the strategies immediately. As one alluded to:

I don't think there's ever a pressure to start this right away. In fact, I think administration will tell us, ‘We don't expect you to be doing this tomorrow. Just try it a little bit at a time.’ If there is something that they do feel we can start tomorrow, they usually are vocal about that. Those are things that are not necessarily extremely difficult, just you can start implementing the very next day.

Moreover, having multiple workshops on the same topic can motivate teachers to pursue the content over a longer period. There is some accountability too from facilitators who ask the participants in the sessions how they have utilized the learning through partner and whole-group discussion. Nevertheless, it is still difficult to actively think about the learning when the follow-up workshops are months away. For example, the follow-up workshop for differentiation was in March, seven months after the initial session. The

extended gap made it difficult to reflect on strategies from the initial session. One teacher stated,

I think it's nice to meet back up, but I think a lot of the times we're like, 'Wait a minute, when did we have differentiation at the beginning of the year?' So much has happened since then.

After the second or third workshop on the same topic, however, teachers evaluated whether they needed to do more or less in the classroom in the content area. As one put it, "It just kind of help(s) you to realize, 'okay, I'm doing it, I'm on the right track' or 'I need to do more of that.'" In some cases, teachers were noticing that they were implementing the learning, even if they initially had not realized it. One mentioned surprisingly, "So on the days where I look and I'm like, I haven't done that, I'm having to go into my lesson and go oh, oh yeah I did. Cool!" Efforts to actively think and reflect on workshops may, therefore, have been piecemeal.

Still, many teacher participants contended that they actively read through professional development materials they receive, even after workshops, and were conscientious about implementing learning. As one teacher noted, "The stuff they have set up already I think does its justice. Then you have to kind of meet them halfway and do your own kind of exploring." Indeed, there is the perception among administrators that participants should bear responsibility for utilizing what they have learned during PD in the classroom. One administrator stated:

So I think we offer a lot of professional development. I think we're very welcoming as we offer it. But, the bottom line is you can sit in a classroom in college and hear about it, but you have to do it. And, that's always going to be it's going to be difficult at the beginning to move from theory to practice.

Indeed, because teaching requires significant responsibility, some perceived that teachers must make use of what they learn and strive to improve.

Yet, unlike the administrators who described the induction program in elaborate detail, the teachers' descriptions were somewhat more fragmented. On the one hand, teachers recognized the support that they were provided through the school's induction program. As one stated, "There's so much stuff that was going on, ISNs, reading to the text, so many good things." However, on the other hand, when I asked teachers what professional development experiences they had as new teachers, they had difficulty answering. Even one who was not in her first year responded, "There is a professional development program for new teachers?" As a result, I probed about specifics of the supports including summer training, mentoring, and peer-observation, at which point the teachers were a little bit clearer about what the program entailed. Furthermore, some who did answer my question initially had an inclination to discuss the after-school workshops, but did not mention the other aspects of the program. One reason could be that the workshops occur with greater frequency than other induction interventions. Another possibility is that the participants had a very narrow definition of professional development that they associated with workshops.

Overall, the administrators described a comprehensive program that includes summer training, after school workshops, peer-observations, mentoring, and observation and evaluation. The program is intended to support teachers, rather than save them, and there is still a perceived element of personal responsibility to learn and adapt quickly in the classroom. While teachers acknowledge the support they receive, they also have difficulty conveying the extent of the induction program. Upon being asked, some talked

about the workshops in isolation, while others needed more probing to describe specific supports. This may indicate that teachers had difficulty seeing the connections and overall purpose of each professional development initiative.

Legitimate peripheral participation. According to Situated Learning Theory, novice teachers should interact regularly with experts to learn requisite classroom skills so they can become full participants in Communities of Practice. Overall, the induction program was designed to improve teachers' repertoire in behavioral management, metacognitive reading, formative assessment, differentiation, and other relevant areas. Administrators, therefore, decided to cultivate these skills through a variety of formal opportunities including workshops, peer-observations, and summer training, and informal opportunities that came with mentoring, the unit structure, and weekly time to plan with departmental colleagues. The latter interventions connected to Legitimate Peripheral Participation because teachers could regularly collaborate with experts on issues of practice, thus having more potential to learn and develop.

However, it is uncertain whether the induction program in general ascribed to Legitimate Peripheral Participation. It seemed that many of the focus areas were only covered through workshops. While some topics were covered over the course of two workshops, it was possible that the beginning and follow-up sessions were months apart. As a result, teachers indicated that they forgot about what they learned. Moreover, if they were not thinking about the workshop material, it is unlikely that the teachers were discussing it in curriculum teams or with mentors.

In What Ways Does the New Teacher Induction Program Help First, Second, and Third-Year Teachers Address Their Challenges?

The teachers and administrators I interviewed described various challenges in attempting to grow and develop in the classroom. While each teacher operated under unique circumstances, there were some commonalities in the challenges they faced. This section will explain how the induction program played a role in helping new teachers address those difficulties. Furthermore, it will also detail some challenges that were not remedied through the program.

First-Year Teaching Challenges

Teachers who were new to the profession faced a myriad of tasks that could make the job difficult or overwhelming. Once they were hired, they had to scan through the curriculum, refresh various concepts or learn new ones, and determine ways to effectively reach a middle school audience with diverse needs. Furthermore, they had to maintain sufficient control of their classes, while assessing if students were in fact learning. They had to attend to out of class duties that included taking part in various teams to meet district and professional requirements, and making a conscientious effort to develop professional relationships with colleagues and students. Additionally, once they entered in the classroom and attempted to complete their planning and grading, they may have found themselves more isolated so they would have to find peers experiencing similar challenges, and/or veteran teachers who were there for guidance and support.

Classroom management. First-year teachers, and even those in their second and third year, may have difficulty handling the reins of the classroom (Feiman-Nemser,

2001). While in their practicum experiences they may have had the assistance of a cooperating teacher, they were now alone to make decisions and bear the consequences. The administrators were candid in that they expected there to be some difficulties with behavior, but believed there should be some semblance of management in place. As one stated, "If there is no control of the class, no teaching is going to happen..."

An integral part of classroom management is the beginning of the year when teachers set up their classroom structure, including the rules and procedures. One administrator stated:

Routines, procedures, labeling in ensuring that that environment is something that will bring the sense of independence, but also a sense of consistency because students need that. You know, they need boundaries, they need consistency... But they also need to know it's really important that you know something as simplistic as you know what's the agreed upon protocol if you would like to ask a question in my classroom or answer a question in my classroom, and that seems so trivial, but especially at this age group, if you don't establish that, kids are going to be calling out.

Inevitably, because teachers set up their classes for the first time, there may have been some oversight with procedures. Furthermore, if teachers did not reinforce the routines, or intervene when students were noncompliant, then the procedures may have become meaningless. One administrator asserted:

In some instances some new teachers diminish the importance of class routines and procedures because they believe that their lesson design is so creative and so engaging that they don't have to spend a lot of time on the management aspect. And I find oftentimes that people come with that approach, it tends to backfire on them because you know you need to start with establishing clear routines and clear expectations for behavior in your classroom and that will allow you to implement these really creative student-centered lessons.

Indeed, having effective management is a prerequisite to implementing creative lessons. In some cases, the teachers had difficulty adapting to the middle school. One teacher noted management as her main concern because it was her first time working with middle age students.

All my fieldwork had been with high school students before getting hired... Kind of that just before middle school age I recall an elementary group. So I suddenly went from kind of knowing how to work with teenagers to suddenly having preteens right before the hormones hitting, so it was just a really huge transition age wise.

The teacher was unsure of what to expect of her students who were hitting adolescence.

In addition, teachers who began their tenure during the middle of the school year may have had a more difficult time molding the classroom culture. Not only did they have to try to create a satisfactory environment, but also change the expectations. One who began her teaching career in January, stated:

I probably until January, February, March, probably the beginning of April cried myself like literally crying myself to sleep, cried on the way home from teaching, like had the nauseous feeling in my stomach, like didn't want to be here. It was very hard coming in, I swore up and down that I was not going to come back the following year even if I got asked and then I think kind of towards the end of the year, things kind shifted a little bit. We also taught like a group of difficult kids when I came into it and then being thrown into it was definitely hard. But I would say for like over half the first like year I was here, it was really difficult and I...questioned whether or not teaching was my thing.

The adjustment to the profession was very difficult and the decision to remain a teacher became tenuous. At the same time, another teacher who began in the middle of the year had the challenge of shaking the presence of the old teacher whom she replaced. In fact,

the old teacher moved to another position within the school so she was still very visible for students. The new teacher discussed the situation:

She's also still in the building and we share a room, so having her in the room at the same time was also conflicting for me because I wanted them [the students] to see me as the teacher and just kind of forget how they used to do things. So seeing her a lot was difficult because I want them to know she's not there anymore, she's not your teacher. I'm your teacher.

While management issues varied from teacher to teacher, new teachers found ways to consult with colleagues for support. Often, this support was intentionally designed within the framework of the induction program. For example, a teacher who intimated she had classroom management problems indicated that she would go to her mentor informally to seek guidance or approval. She stated:

Yeah, and she would give advice and there were points where I would be like am I overreacting if I yelled at a kid for this? Or gave the class the riot act for this particular thing going on? And she would say, if they know they crossed a line you were in the right giving the whole class a riot act on that. Cause that's not one individual kind of thing.

The same teacher actually had the courage to indicate to her supervisor that she was struggling with classroom management. She then leveraged her supervisor to conduct informal observations and provide formative feedback for improvement, stating, “I started describing the one class that was giving me a lot of trouble so just out of nowhere she would pop in to do an observation and give me a bunch of feedback.” The feedback allowed the teacher to make adjustments for the following year. As she noted:

Based on that and they were trying to adjust things so it was definitely kind of a mixture of asking for advice and like the walkthrough and getting feedback from those. But then by the time I got to [the school] for this I knew everything that didn't work the previous year, it kind of set up plans ahead of time with a little bit

more structure than I thought I would have needed initially. Different age group, different levels of structure, so it kind of was a mixture of experimentation and advice from my supervisor.

Other teachers who were asked how they got through management issues similarly indicated collegial support. Yet, many of the adjustments they made were for the following year. Thus, they had to live with and abate the issues that compromised their classes. As one teacher was told in her summative evaluation, “You were thrown into a sink or swim situation, and luckily you swam.” The teachers who survived and made it to the next year fortunately were swimmers.

Formative assessment. When considering how to assess students, many new teachers assume a combination of projects and tests. But, according to interviewees, assessment should be constant within the classroom because teachers have to know whether they can move forward with the curriculum. If some students are ill prepared, then they may be left behind. One administrator stated that new teachers are less likely to formatively assess students.

I think it takes time for teachers to really understand the notion of like I've taught you this material for this unit. Now I'm going to provide you with the assessment on it and I'm going to grade on it, and then we're going to move on. We're going to move on. And it's that notion of prior to getting to that end of unit assessment, what kind of formative assessment strategies have you put in place as a teacher day to day week to week that enables you to say, you know what, I think my kids are in a pretty good place...that takes time right?

Recognizing that it takes time, administrators included two professional development sessions on formative assessment, one during the summer, and the other during the school year. The workshops proved timely for one teacher, who realized that her students weren't understanding the book they were reading in class.

So I would just ask like they thought Alex, the main character, I think we were on like Chapter 5, and someone, more than one student said ‘oh yeah I think he you know is really immature.’ I was like who do you mean by he? And, he was like Alex? And, I was like hold up, Alex’s a girl. So those little nuances, I’m like those are important in understanding the book.

As a result, the teacher took to implementing reading quizzes just to make sure students were on top of their homework. Furthermore, the formative assessment workshop gave teachers prepared activities to help assess students. The teacher also pointed to the fact that she utilized the strategies during her formal observation and was commended by her observer for her closure activity, which she learned during the workshop.

Procedures. Aside from constantly assessing student progress, the teachers also had to adjust to the school procedures, including the logistics and locations for meetings and the copy machine. One administrator indicated that teachers have trouble figuring out, “Where do I copy this? What happens if there is a fire drill? Where’s the bathroom?” Many of the teachers corroborated that they had difficulty learning school procedures.

One indicated:

So I took it upon myself to flip through the handbook in the agenda, but I feel like the first few weeks of school I was maybe not enforcing rules that my colleagues were enforcing because I had no idea like the whole BYOD. No, I had no idea what BYOD was. No, I did because I did my student teaching, but I have colleagues who are first years who had no idea what BYOD was. They didn't know that they could have their devices in class or they couldn't have their devices at certain times. So I think being on the same page in terms of school policy would have helped because I feel like I was not enforcing school policies at first. And, I had to learn as I go, you learn on the fly, but definitely maybe the first time I learned about school like new rules that were getting put in place was this, the staff meeting on the first day of school or the day before the first day of school... So I wasn't doing BYOD. And then I realized, oh wow, North allows BYOD I was just kind of having no devices. And then like kids in the cafeteria I was in the hallway one day and I'm like yelling at them and they're like well we're allowed to have our phones out when we're going to the cafeteria. Are you really? So I guess just more transparency would have been helpful.

BYOD refers to Bring Your Own Device, a new policy that allows teachers to grant students the privilege to utilize their personal phones, tablets, or computers for educational purposes. While there are benefits to BYOD, many teachers have trouble determining when to pick battles with students over appropriate use, particularly in the hallway.

There was also confusion over bathroom policy and scheduling. One teacher could not figure out whether she had to sign out students with a key like in another school, or make the decision about what to do. Another did not know what her schedule was until the first day of school. She elaborated on her confusion with drills, “I didn’t know what to do with a fire drill...I didn’t know what to do in a lockdown.”

Furthermore, confusion extended to the online staff portal, grading system, evaluation portal, assessment database, professional development schedule, and IEPDirect (for special education teachers), which all have separate usernames and passwords. As one teacher alluded to, “Learning how to use the websites, the PowerSchool, the My Learning Plan, PDexpress, all that I think is really important, because I think that was my biggest struggle.” Another teacher stated,

Like I said I just overheard people saying, oh yeah Performancematters, I was like maybe I should go look at that. Yeah like if someone said, okay this is Performancematters and this is what you can find on there because it's important to go look at all that stuff, but no one told us that.

Performancematters is the online system that teachers use to analyze assessment data.

To learn to utilize the online systems, teachers consulted with colleagues, including the teacher coach, mentor, or unit colleagues. One teacher alleviated her

anxiety by rushing into her unit colleague's room any time she had a concern. Another teacher expressed how fortunate he was to have a teacher coach in his first year help him because he would have otherwise been lost.

Certainly with regard to the computers and whatnot, I missed new teacher training my first year, so I had to kind of learn PowerSchool through my teacher coach. If I didn't have...a teacher coach last year ... There was one meeting I think devoted to understand PowerSchool, and it was kind of rushed and thrown out the window. I was fortunate enough to have a teacher coach last year. We don't have a teacher coach again next year, and there's new teachers who are not going to be familiar with the new program, Genesis. They got to make sure they devote enough time to that. I guess they do have some of that in new teacher training, but that will be- I remember a new teacher training I think one day we spent more time looking at databases, and I would have rather sat there and just really taken apart Power School for a solid 45 minutes instead. Databases I can do some other time.

Given that the teacher coach position was cut, new teachers this year had to find other colleagues for support.

However, even though they often found this support, the new teachers were not free from error. One missed bus duty and completing progress reports for her students. Another did not know about the school-wide competition for reading pleasure books or that she had to administer a word quiz to students that her department implemented the previous year. As a result, she gave short notice and had to apologize to her students.

Overall, while many teachers openly expressed how grateful they were to have helpful colleagues, they were still reluctant to ask for assistance. As one alluded to, "I don't want to pester anyone with too many questions. It's overwhelming in the sense of not knowing who to go to and not wanting to bother anyone." One teacher's advice was to just utilize the experience of others, even if it may seem annoying. She noted:

I guess just use veteran teachers. You might feel like you're being annoying, like I felt like I was annoying [a colleague] at the beginning of the year, but even the other day, I was like, 'Am I annoying?' She was like, 'No.' Just know when to ask the smart questions. Like know when to trust your instincts. That's what I will miss about the middle school. Is the structure of the support. Like going up the hall and like, 'Hey, when are we going to this assembly?' You know, like that kind of stuff.

Those who worked in teams found that their teammates were an invaluable resource.

However, not all teachers, including elective and foreign language ones, were fortunate enough to be a part of such workgroups.

Curriculum. In addition to school procedures, some teachers had trouble adjusting to the curriculum. While some subjects had more rigidity, most teachers found their curriculum to be very self-directed. Some liked having much more autonomy, but many were stressed about how to feasibly deliver the curriculum in a year, while pacing accordingly. One teacher who teaches special education reading and writing preferred the autonomy because she could make adjustments based on what she was seeing. For example, because many students lacked rudimentary punctuation and grammar skills, the teacher decided to incorporate a unit on it during the school year. She said:

So, with writing, with the special ed kids I...There just weren't...There was some things that I wanted to cover because I saw that in their writing they were lacking, like they didn't know how to use commas, they were lacking capitalization, so we were covering that last week, capitalization, now we're doing commas. But I know it's something that they need and just to prepare them for high school, so I started something new.

She was also able to select what books to read for literature.

On the other hand, some teachers felt angst at having too much freedom with their curriculum. As one noted:

So I sort of feel like they kind of just threw us in kind of like sort of sink or swim, but not so much in terms of I guess especially with the curriculum. If anything I feel like I could use more support in it's with the curriculum.

Indeed, as an administrator indicated, teaching is challenging in that teachers have to read, interpret the curriculum, and determine how to “impart it” to middle school students.

Teachers claimed that meeting with colleagues weekly during collaborative planning time (CIPD) was useful for materials, grading, and pacing. One teacher even called the meetings a “lifesaver” when it came to obtaining readymade curriculum resources, and wished for even more time. As she noted:

So we have once a week devoted to it, which is really helpful. But, that's definitely not enough time. It might be for me not having my mentor there all the time. That makes it harder because my eighth grade colleagues are really the only ones I'm going so then I start feeling like I'm annoying them because I'm like asking them everything because they're the ones who I got closest with.

The teacher, additionally, asked for support for teaching books that she was not as comfortable with. At one point, she was ready to move on from a book, but her colleagues encouraged her to slow down to allow for more students to process it and its invaluable life lessons. As one teacher with more experience stated, “I think you should slow down because this is probably the most important book we read.” After the completion of the book, the new teacher noted that she was glad that she did not rush the unit of study.

While some teachers enjoyed the fruits of a productive workgroup, others did not have the luxury. Special education teachers, in particular, had opportunities to

collaborate with co-teachers or general education teachers who share the same content specialty. However, the relationship was more limited because they were not necessarily teaching the same curriculum. For example, a special education literature teacher and mainstream literature teacher did not teach the same books. Thus, aside from inclusion classes, special education teachers really had no opportunities to collaborate on lesson plans. Even opportunities to talk to other special education literature teachers were limited because they worked in other grades and operated on a different schedule. One special education teacher noted, “I don't really interact with any of the special ed teachers in the other grades so I would want to have, like collaborate with them a little more.” The onus for creating and enacting the curriculum, thus, essentially fell on one person. “It’s me, myself, and I” said one special education teacher about working on his curriculum in isolation.

Many new teachers also employed their mentors for help with curriculum. Teachers who worked on the same curriculum, in close proximity, and on the same schedule as their mentors met the most to collaborate. As one teacher alluded to during her first year about her mentor:

She was also seventh grade writing so she was able to share materials with me and let me bounce ideas off of her. And because we were next door to each other, we could either meet during an encore period or we could just chat in the hall during passing period.

Being next to one another allowed for formal and impromptu meetings to occur.

By contrast, new teachers and mentors who had different schedules met more sporadically. While mentors could still be of help, mentoring relationships were more

limited. In a best case scenario, mentors and mentees met before or after school. One teacher, explained this limitation:

So after school doesn't really work. We've met we've only met a few times before school, but even then we have like 20 minutes and then kids are already coming in. So that makes it hard not having a mentor in my grade level. Like we just never have time to meet. So I'm going often to like my you know my colleagues grade level literature teacher or the writing teacher in my unit. Which...they're so helpful but I'm not going to the person who I'm supposed to be going to because it's just there's no time like throughout the day.

Still, the two were able to meet at the beginning of each unit to discuss plans and general ideas, which proved somewhat useful. Several other teachers who had mentors in different grade levels rarely discussed curriculum, if at all.

Summary of induction help to address first-year teaching challenges. After discussing the challenges of first-year teachers with administrators and new teachers, it became apparent that many had difficulties related to classroom management, formative assessment, school procedures, and curriculum. Teachers found solace in the fact that they could garner help from mentors, unit colleagues, supervisors, workshops, and grade level departmental peers. However, in some instances, the help available inadequately addressed the problem. Some teachers made procedural errors, and special education teachers found themselves more isolated in fulfilling curricular demands, while others found insufficient time to meet with mentors who could be of help.

Legitimate peripheral participation. General education teachers who taught core curriculum subjects seemed to benefit the most from regular access to experts. They had grade level departmental colleagues from whom they could seek advice from about curriculum concerns. Many also had mentors who worked on the same schedule with

whom they could address management or curriculum issues with. By contrast, special education and encore teachers had limited access to experts who worked on the same schedule and taught the same curriculum. They also did not have curriculum teams to whom they could go to for help with lesson plans. Thus, it is likelier that they worked in isolation, which may explain also why they were more prone to procedural errors. According to Lave and Wenger (1991), teachers who are isolated have more difficulty moving from periphery to the center of a Community of Practice where they have developed in their knowledge of the school environment and valued teaching practices.

Second-Year Challenges

The expectations for teachers in their second year increased from the first year. According to administrators, “classroom management is something that’s expected.” School procedures have likely become ingrained, while many have the opportunity to teach the same curriculum again, which allows for reflection, refinement, and relief from brainstorming something new each day. Second-year teachers have also had time to test out strategies to grow in their repertoire of skills. As one noted, it gave her the ability to “predict outcomes” in the classroom. Yet, in analyzing the evidence from the data, second-year teachers still faced challenges related to lesson plan design, forming strong in-class partnerships for inclusion classes, and reaching challenging learners. Furthermore, they reported facing more pressure to perform.

Lesson plan design. The teachers who made it past the first year demonstrated satisfactory performance to warrant being rehired. Hence, they had the ability to plan and deliver lessons. Nevertheless, showing that capability on a consistent basis remained a

challenge. One teacher asked me upon finishing an interview, “When does it become easier?” as if there should be an “aha” moment when lesson design begins to click.

Another teacher found there to be a significant learning curve to adapting the content to the students. For example, to engage special education students, she attempted to make her curriculum more project and real-world based. However, she often discovered problems in the implementation of lesson plans. What she cited as most important to her development was “failing in the classroom.” Sometimes she would notice something go wrong in the first ten minutes, and “scrap the lesson” in favor of something different. In some cases, lessons only needed a small adjustment. For example, when discussing a math problem on skiing and sledding, the teacher noticed that three out of ten had engaged in neither activity. As a result, she supplanted skiing with roller coasters, which all students could relate to.

Like the first-year teachers, second-year teachers who struggled with planning and curriculum received some assistance from grade-level departmental colleagues during weekly meetings. One teacher noted that he still relied on his colleagues for pacing and guidance, stating,

We sometimes meet just informally too, just like passing in the hallway, or I'll go down to one of them, or they'll come down to me. Usually, we'll meet up, we'll talk, planning usually, and where we are in terms of the content. We try to stay very close to each other. Sometimes that's tough because both of them have been here at least I think, 10 years at the least. They move differently than I do. I rely on them.

In short, the teacher felt the gap in experience him made him rely more on his colleagues' expertise.

However, special education teachers, and by extension foreign language and elective teachers, were more or less on their own to figure out the curriculum. While mentors were generally still accessible, teachers reported meeting fewer times with their mentors in their second year unless they still worked on the same schedule. Moreover, special education teachers could bounce ideas off their colleagues, but they were unlikely to find peers who were teaching the same curriculum.

In-class partnerships. By the second year, many teachers also reported working in inclusion settings with a special or general education teacher. On the one hand, the teachers found their in-class partnerships to be generally very positive because there was a shared commitment to the students. However, on the other hand, there were limitations that the teachers had difficulty circumventing. For example, one teacher found that in her first experience in an inclusion setting, she had trouble tailoring instruction for advanced and special education students. She stated:

I did not have any in class support in the classroom last year. I've got one this year. It's a large in-class support setting. It's like half the class is in-class support. In addition to that, I'm working with a colleague who's new to the district as an in class, you know my in-class support teacher. That has definitely been a challenge. Making sure she has a voice in the classroom that's equal to mine, and also having to teach her the content, and help her understand that as well. It's been fun. It hasn't necessarily been negative, but it has been a challenge... I almost feel like I would have benefited more having a seasoned veteran in my room, which I was supposed to initially, but then with the whole change up, things got switched around.

While the teacher would have liked more assistance from her in-class support teacher, her partner came midyear. Her partner also had other classes to plan for, which made meeting somewhat difficult. Consequently, the bulk of planning fell on the general

education teacher, while the special education teacher played more of a supporting role, modifying lesson materials that were sent to her ahead of time.

From the vantage point of the special education teachers, there was difficulty in prioritizing. Some had multiple teachers to prepare with, and classes to attend to. Within the school year, they also had to balance progress reports, IEP meetings, and unit meetings. Hence, they felt pulled in a number of directions. As one second-year special education teacher indicated:

It was definitely difficult for me to plan with both ICS teachers, first off because they're different content, so it's not necessarily ... if I'm like doing social studies for multiple different social studies teachers, then it's relatively the same content across the board. This was, since two different contents, I couldn't necessarily have the same mindset, the same framework. So it definitely alternated between days who I was going to talk to.

Indeed, the teacher had to make decisions about whom it was necessary to meet with at a given point in time.

Another teacher found herself in conflict with her inclusion teacher because she wanted to utilize strategies that she learned in college that ran counter to her inclusion teacher's strategies. At one point, the inclusion teacher asked her, "What are you teaching these kids?" To placate her partner, the new teacher exclaimed that she was utilizing a combination of strategies.

Overall, the induction program did not really address the challenges that teachers faced in their inclusion partnerships mainly because the problems were more related to time limitations. As a result, teachers prioritized and managed as they saw fit. In some cases, the solution was finding time within the class period to discuss plans while kids

were working with partners or independently. In other cases, it was a matter of finding time to meet during one of the preparation periods.

Challenging students. Despite handling the reins of the classroom, second-year teachers also reported difficulties in addressing the needs of challenging learners. One teacher expressed:

They're getting lazy and... Both. There are some kids where they don't have a behavioral issue. They're just shutting down. They're just not doing their work. Then there are kids with behavioral issues that are even more so behavioral issue now because they're more lazy. Nothing extreme or anything. It's just there's some students who present certain attitudes and whatnot that aren't appreciated.

The teacher also said the problems were present in colleagues' classes so he was consulting with members of his unit for ideas to reach the students. As he alluded to, "We've had to put in some plans into action to keep them on track, so sometimes that gets frustrating." Like others, the teacher found the unit structure to be a realm in which to receive assistance for behavioral problems, noting,

I mean, probably the biggest thing I love about working here is the unit structure. It's a true team effort. I think working with children is a team effort in many senses. Not only you with the child, and the parent, but you with other teachers too. I think because I have the opportunities to not only just talk with them about the same students that we have but that allows for more conversations to open up. Being able to talk with them all the time during unit meetings, or what not, just little things like how to be a teacher.

To get help with behavioral issues, the teacher also considered the idea of trying to observe a seasoned colleague, but gave up on it after the problem mitigated. Another teacher had trouble getting particular students to adapt from a pullout class to an inclusion setting where the expectations were more rigorous. She noted:

Right now because they moved a student from a replacement setting to an ICS setting, I'm really thinking about it because the student is, feels very difficult in the classroom, feels that the class is very difficult, and therefore, is basically saying I don't want to do any of this. And now is also trying to start to be, result in behaviors that are inappropriate. So I want to jump on that.

Whereas the first teacher seemed lost, this teacher had the idea to implement a behavioral plan. Both teachers also expressed their issues in May at the end of the school year, when there are generally more behavioral problems with the impending summer vacation.

Pressure. Lastly, a challenge that teachers in their second-year conveyed was feeling more pressure to perform. In this regard, they felt the second year was perhaps even more difficult than the first. As one stated,

There's definitely the challenge of this year you don't have a lot of things to fall back on, like you're not a first-year anymore. You need to make that jump, and you need to make it now. So there's definitely some pressure involved there. At least I think a lot of us feel that. I think it's a little bit of both. I think it's definitely that. I mean that's totally understandable. It's also myself as well. I feel like I've done it once before. If I messed up something last year, I had more of an excuse because I'd never done it before. This time I'm approaching it the second time so, I almost feel like there's that innate sense of I can't mess up this year. I can't mess up ever. I know you're not supposed to think that way, that's kind of how I feel. You don't want to disappoint. You don't want to disappoint your students. You don't want to disappoint the administrative team. You don't want to disappoint your colleagues. There's a lot of that, that comes into your mind.

While the teacher clearly put pressure on herself to avoid disappointing others, others felt a burden because they did not know whether they were getting rehired and how the administrators perceived them. Upon walking into her summative observation, one teacher noted, "Last year, 100% I thought I was going to get fired."

Part of the pressure stemmed from the fact that the teachers did not have a gauge on whether they were getting rehired. Some teachers were looking for affirmation, which they found to be inconsistent. For example, one teacher stated:

Somebody popped in... I don't know, but they like they come in, they don't give you feedback. So they just kind of like stare at you and they walk around and they talk to the kids and then kind of look at them like as some type of validation or something and they normally don't give you anything. So having people in and out of my room I remember being like am I doing something wrong, are they letting me go...I didn't really understand what was happening. So it was hard.

Teachers, moreover, could not assume that no feedback was a form of validation. As one alluded to, after approaching an administrator about her pop-in, the administrator then gave feedback for improvement. Overall, the pressure teachers placed on themselves was not easily corrected, but could be alleviated with consistent support.

For example, in the previous year the teacher coach would review observations with some of the teachers and provide assistance based on the feedback. The teacher coach would then come back to observe, and affirm that teachers were taking positive steps. Other teachers reported that mentors also regularly provided feedback and problem solving tips after reviewing their mentees' progress on evaluation reports.

Summary of induction help to address second-year teaching challenges. From the interviews conducted, it became apparent that second-year teachers faced some unique challenges. First, some still had difficulty with lesson planning and curriculum, and continued to rely on colleagues for curriculum support; unfortunately, however, special education and encore teachers who did not teach in core subject areas were more isolated. Second, those who engaged in inclusion settings found fulfillment in learning and growing with their colleagues in the classroom, but they also sensed limitations,

particularly with time for planning. There was no real induction support that corrected this issue, but teachers managed to survive by prioritizing their commitments. Third, some struggled with figuring out ways to reach struggling and disengaged learners, and consulted unit members or other colleagues about potential solutions. Lastly, teachers generally felt more pressure to perform. In some instances, they looked for validation from administrators, which was inconsistent.

Legitimate peripheral participation. Like their first-year colleagues, second-year teachers still reported various opportunities to interact with veteran colleagues including the teacher coach (when the position existed), unit colleagues, co-teachers, mentors, and grade level departmental colleagues. These experts were useful in helping with curriculum or behavioral management. However, the new teachers sensed a drop in the level of support that they received in their second year. Not only was the teacher coach position cut, but they also found less feedback in walkthroughs, which contributed to their unease professionally. In addition, like their first-year colleagues, special education and encore teachers received much less help. In general, by the second-year, interactions with mentors had all but dissipated, except for those teachers whose mentors who taught on the same schedule. As a result, teachers were likely to find fewer avenues of support, and thus tackled some problems individually such as how to best support the needs of all students in an inclusion class. The fact that the two second-year teachers who were interviewed were not rehired, however, suggests that they may have been able to use the additional support. Indeed, proponents of Situated Learning Theory espouse that novices must interact regularly with experts to effectively learn and develop.

Third-Year Challenges

The teachers who made it to year three in the school experienced fewer challenges than their first and second-year peers. They reported more confidence in the classroom, and greater ability to manage and assess students, despite facing growing pains in their first two years. They planned with students in mind. As an administrator pointed out, students “need to know the teacher likes them, loves them, cares about them.” Besides having a better understanding of how the school functioned, the teachers grasped that they were teaching kids first by readily adapting their lessons to student needs. One stated, “I always made lessons that I know I could tailor to my kids and my kids would be successful.”

The expectation for third-year teachers was that they “pull in best practices” and “become a little bit more of a risk taker in terms of presentation models and looking to delve deeper into the notion of differentiation, and utilizing data to drive instruction.” The administrators’ perceptions were consistent with that of the teachers who valued experimentation in the classroom to build upon their repertoire. Thus, the challenge for these teachers was to continue to exhibit growth and refine their skills in the classroom.

Because they were in a position in which they were already improving in their craft, it is difficult to say how the induction program provided them with any assistance. However, both interviewees were at one point part of very collaborative grade-level teams that planned and paced accordingly. One stated:

We would make the materials, I’ll do the lesson plan, you do the materials. So we were able to plan together and cohesively make really good units and stuff.

Thus, the teacher's team was not only able to share ideas, but divide up tasks to build strong units of study.

Her third-year colleague, however, had somewhat of a different experience. She switched grade levels once and went from teaching writing to reading, and thereafter went back to writing. She had also switched schools. While experiencing so many changes provided challenge for her to keep up, she found herself surrounded by supportive colleagues who also shared their resources. As she noted, surprisingly:

Rebecca was legit, in June was like, so I just saw that you got moved to writing, I've actually already planned out all of September. So in August I'll add you to the Google doc. And I was like, whoa.

While the teachers built collegial relationships, they also demonstrated evidence that they were refining the curriculum they taught to better meet the needs of students. One teacher decided that she would emphasize more nonfiction; thus, she spent time in class teaching the context of the Holocaust and Civil Rights Era for *The Book Thief* and *To Kill a Mockingbird*. She also noted that she wanted students to be able to draw connections to present day, and was willing to hold Socratic Seminar conversations that drew links between the books and present day so long as the points and arguments were “factual.” The teacher perceived the changes she made to her instruction to be positive because she reported increasing levels of engagement.

Recognizing that the books and research were difficult for some, however, she tailored her instruction to meet the needs of struggling learners. For example, because some students found *To Kill a Mockingbird* to be very challenging when they entered class, the teacher developed several ways to accommodate them. She stated:

I would slip them a card that had a summary of what they were so they would know what's going on. If there was an activity that focused on the chapter, I'd make sure I'd go over the major points together as a class. I always did little things that seemed like I was doing it for the whole class, but it was also targeting more towards the other kids.

By embedding interventions, the teacher was confident that all students were able learners, which reflected the school mission.

Her third-year peer also found ways to individualize instruction within the writing curriculum. When she first began teaching writing, she would assign extended tasks including narratives, persuasive writing, argumentative writing, and poetry that students worked on over the course of several weeks. Often within these extended periods, she would teach a skill at the beginning of class and hoped that students would apply it to their writing. However, what she noticed was that students came into her classroom with varied skill levels. As a result, rather than having every student listen to her short lectures, she set up more of a workshop model that encouraged students to sign up for short workshops in various skills that they may have struggled with. The teacher, thereafter, kept records on the students who attended, and nudged some students who may have been a bit more reluctant to attend. She described the model in somewhat more depth, stating:

It'll be a five-minute workshop where I'll have a handout and they'll go over the information on it. Or they'll all bring their laptops and copy/paste into a document, we'll do a color-coded highlight or something like that. And then they go back to their seats and they work on stuff, and I walk around the room and I conference. And then I do the other workshop. Sometimes it's one where the whole class doesn't necessarily need it, or it works better when it's smaller groups. So I just do two sessions of the same one or something. And then for some kids if they just blatantly don't sign up, I'll give them an extra copy and-This will be very useful for you.

In short, third-year teachers were learning and applying ways to allow for all students to succeed at their own pace and level. While the teachers' first two years gave them a rudimentary understanding of what works in the classroom, they were still making strides toward growing and developing in the classroom by taking risks and experimenting.

Legitimate peripheral participation. The interviews with the third-year teachers suggest that they had moved beyond the challenges that their first and second-year colleagues faced. Based on Lave and Wenger's (1991) framework, it seems plausible that they were no longer operating on the periphery, which meant that they required less attention from expert colleagues. This matches Feiman-Nemser's (2001) framework for teacher development, in which teachers in their third to fifth year move into the second phase of development. At this point, teachers have a grasp of instructional routines and practices, and have developed feelings of self-efficacy. They are consequently prime to continue to grow through professional development, which was the case in my school where the teachers continued to benefit from collegial relationships, particularly when it came to developing and refining the curriculum. Collaboration through curriculum teams allowed teachers to plan richer lessons for all students.

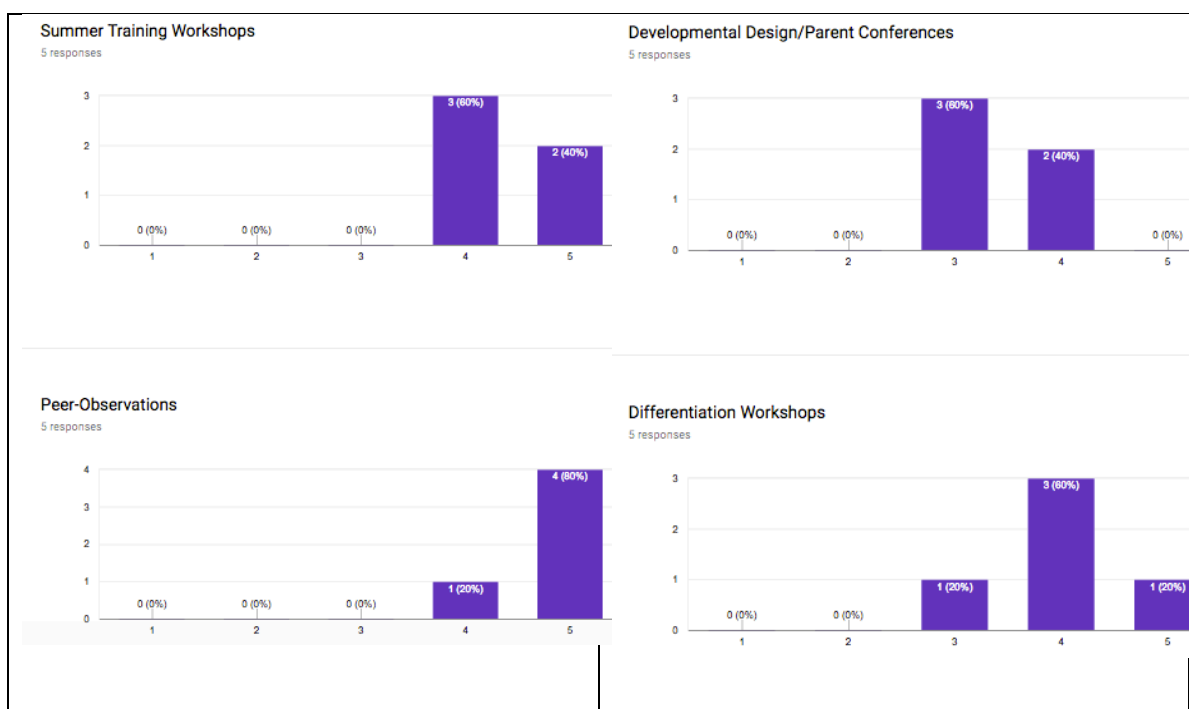
What aspects of new teacher induction are perceived to be most effective?

The surveys and interviews spoke to what aspects of induction teachers perceived to be effective. In April, I emailed first-year, second-year, and third-year surveys to respective participants in both middle schools. Aside from utilizing the results, I elaborated on various interventions by utilizing the interview data. The survey included all professional development initiatives that were available to new teachers in the 2016-

2017 school year. Each was scored on a Likert Scale from not useful (1) to very useful (5).

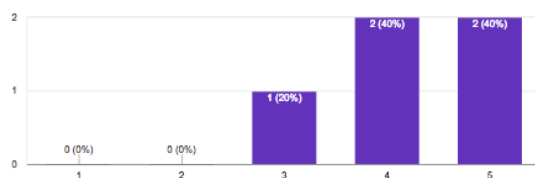
Figure 1

First-Year Teacher Survey Results

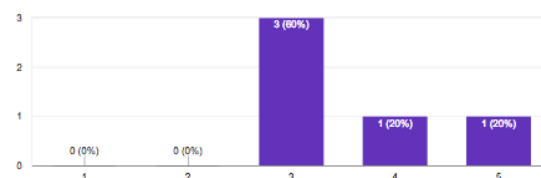


Formative Assessment Workshops

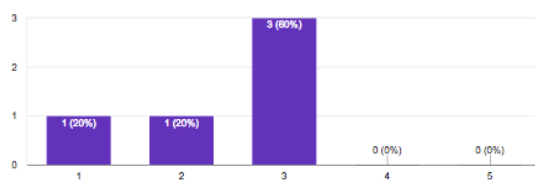
5 responses

**Portfolio Workshops**

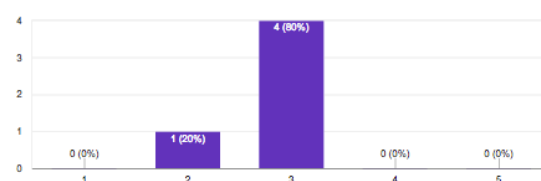
5 responses

**PARCC Skills Workshop**

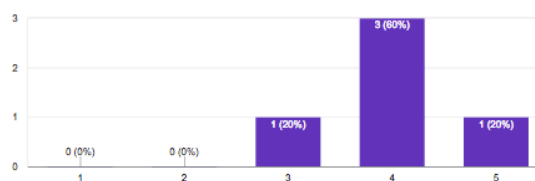
5 responses

**Reading Apprenticeship Workshops**

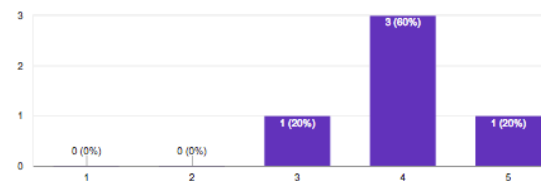
5 responses

**CIPD Meetings**

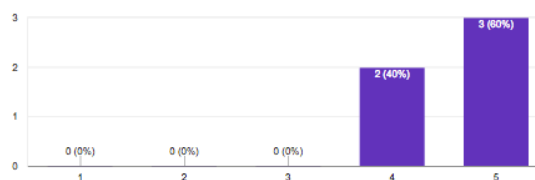
5 responses

**District PD Days**

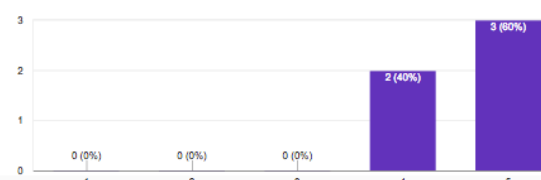
5 responses

**Meetings with Mentor**

5 responses

**Evaluative Feedback on Observations**

5 responses



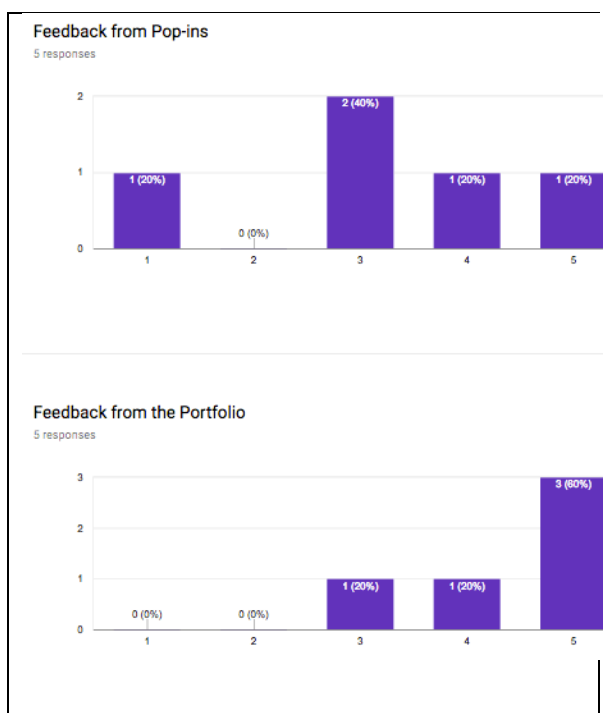
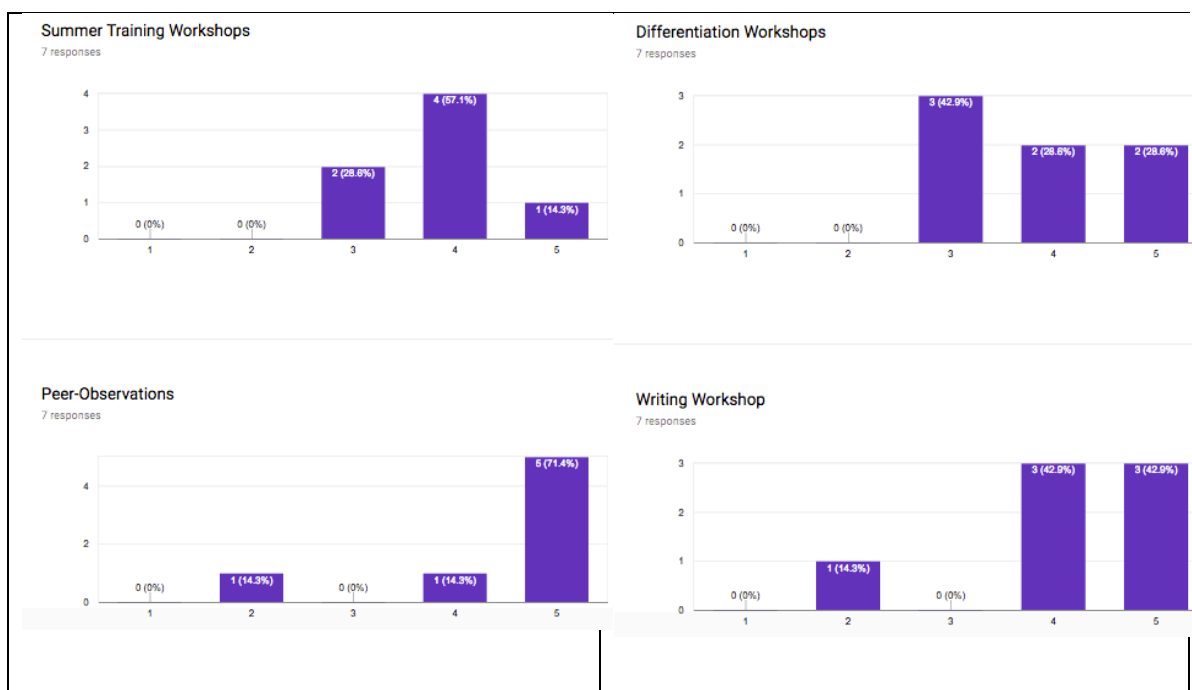
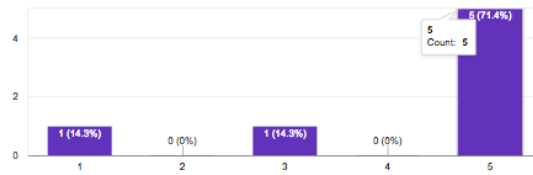


Figure 2

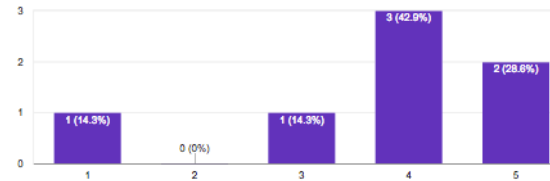
Second-Year Teacher Survey Results

Close Reading Workshop

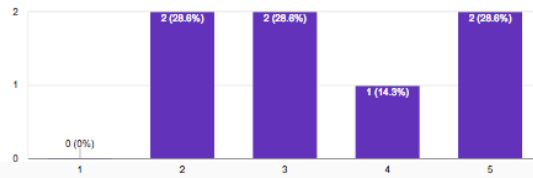
7 responses

**Reading Apprenticeship Workshops**

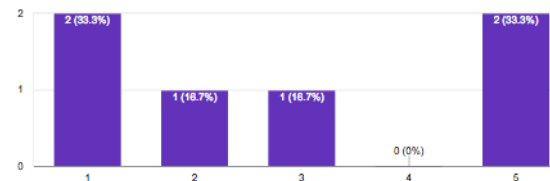
7 responses

**Portfolio Workshops**

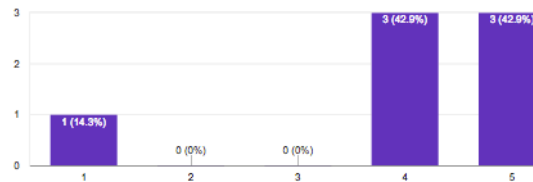
7 responses

**CIPD Meetings**

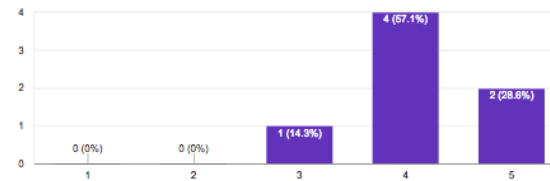
6 responses

**Meetings with Mentor**

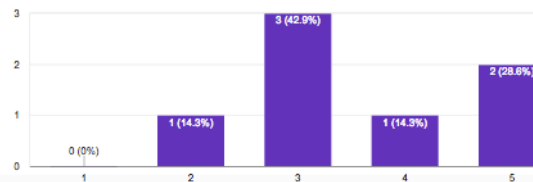
7 responses

**Evaluative Feedback on Observations**

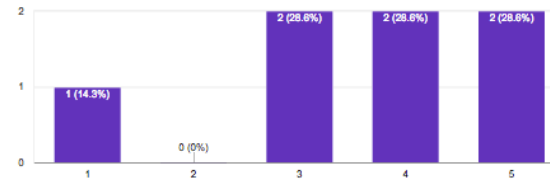
7 responses

**District PD Days**

7 responses

**Feedback from Pop-ins**

7 responses



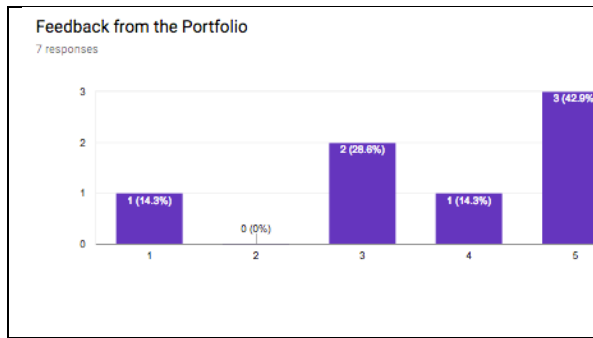
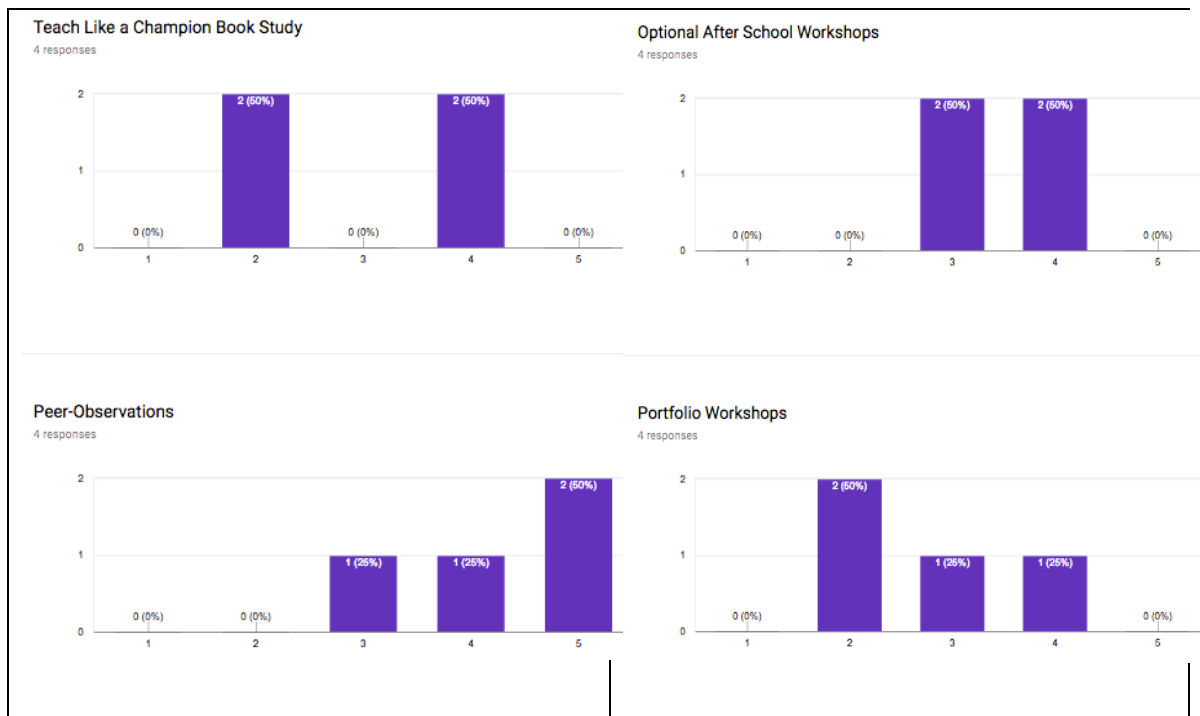
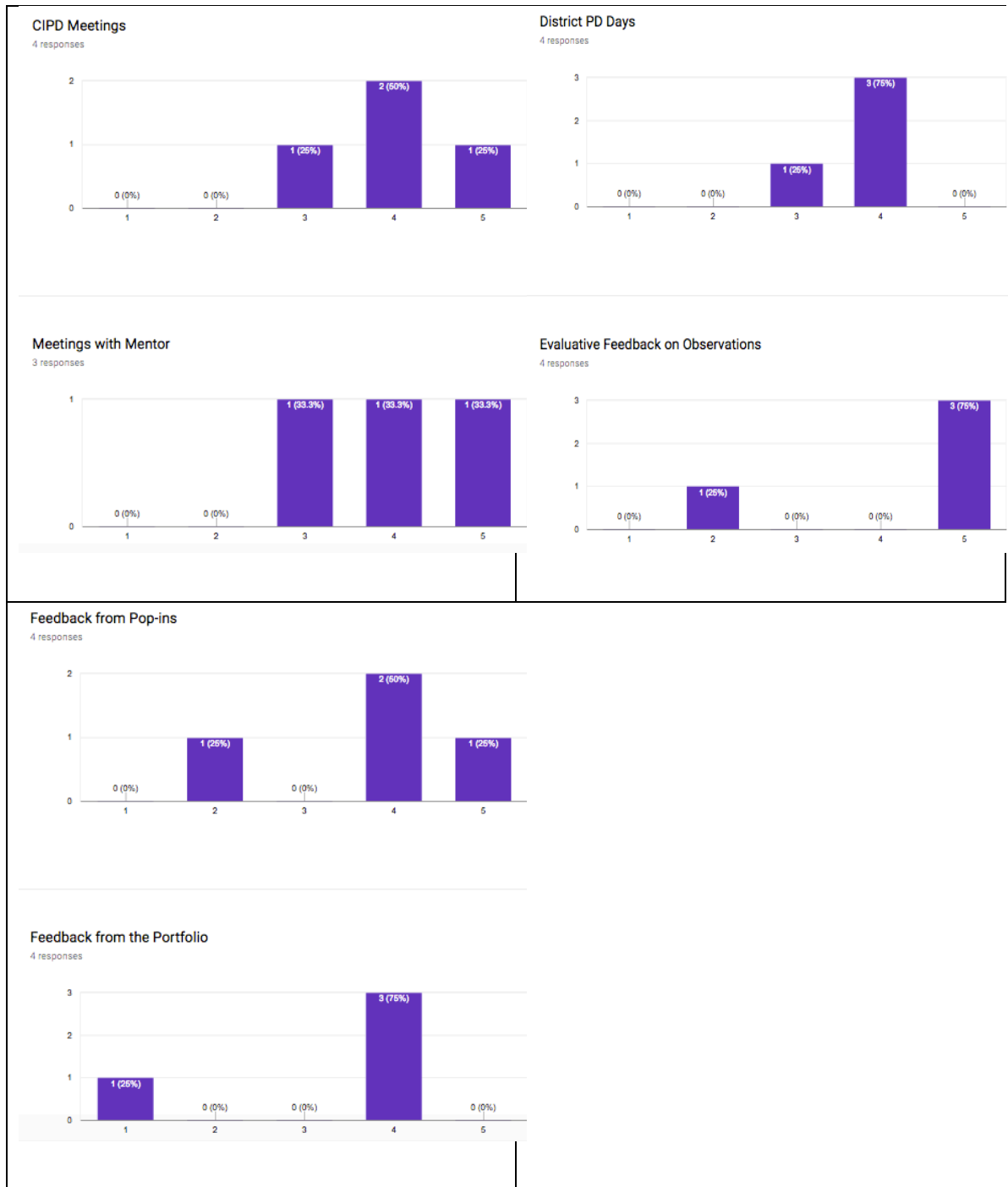


Figure 3

Third-Year Teacher Survey Results





Peer-Observations. The overwhelming majority of teachers (N=11) found to peer-observations to be very useful, which was substantiated by the interview evidence.

In describing the practice, an administrator stated:

You know we have teachers here, having the opportunity to observe classrooms of their peers in a setting that seems to resonate, is really a valued practice, where teachers find that they can see it, right? We designed it in such a way we're asking folks to walk in with a predetermined look for or two or three. So it kind of just makes it, but in the process though, even though I may say you know what I you walk in and look at transitions in this classroom or some checks for understanding, inevitably teachers walk out of there and they record that, capture that. And it's almost like what do you see that's kind of reaffirming your practice, what do you see that you may want to try? But in the process, they always capture things outside of what we've asked them to look for, which is awesome to me. So there's things that are affirming, things that are aha moments, but it's not just, it's restricted. So I just think there's an opportunity for, and I do this as an observer like I'm in a classroom I can be observing the lesson and I see things that, you know every teacher has their own individual personality, style right so you see certain things people are implementing, you see how someone uses their wall space you know there's certain things that I think that are valuable so yeah, teachers like to see other teachers in action.

Essentially, the teachers attended their colleagues' classes with an idea of what to look for, but came away with more.

For the most part, the teachers viewed peer-observations as job-embedded learning opportunity. One alluded to the benefits:

I mean they always talk about how teaching is really isolating and you're kind of in your little classroom bubble that maybe you have a co-teacher in and the people who come in and walk, but you never really see what other people are doing. So I really like that day because it's a chance to really look for ways to do things that maybe I haven't considered before. And in grad school they always would have you, you know, go observe a teacher at school for three hours on a Friday morning. But, you didn't really have any teaching experience so you might not kind of know what to look for.

Those observing, indeed, were much more attentive than during their pre-service education because they had classroom experience that they could relate to.

The teachers also described specific ways in which they utilized the learning in the classroom. One teacher noted how she observed a teacher model using vocabulary:

I noticed one of the teachers with what she was teaching she was always using the terminology a lot. Like she was talking about transitions. And so as she was talking she would emphasize the transitions she would use in her language, and so that's something I took away that I have keep in mind when I'm teaching something to use it as I'm going and even afterwards.

Another teacher learned how to leverage technology apps to streamline feedback to students on their writing.

Jessica was doing a drafting day and it was perfect because the very next day, I had like essentially the same lesson plan because we're both in the same the same point in the unit that we were doing, and she had the kids on the Chromebooks and she actually projected Google Classroom and she did like this live feed of giving feedback to kids so she had it like blown up to a spot where you could read it on the projector and she could just open up kids' documents. So if a kid was stuck and had writer's block they could just watch the live feed for a minute or two and get ideas. So if she highlighted something and said put a little more detail here, they might look at their own paper and go, Oooooo yeah I need to add a couple more sentences to clarify something. Or maybe it wasn't feedback that she was giving but something that they saw one of their classmates doing that they really liked. So like there was a kid who was just kind of watching it for five minutes, and at first I was getting a little worried that he wasn't watching it for help and was just trying to avoid working, but then as soon as he saw one thing a kid did, I want to do that and started trying it out on his own topic in his own paper.

The use of technology allowed students to share and gain ideas, particularly when they had writers' block.

While most teachers found peer-observations to be very useful, some contended that there should be more opportunities to observe throughout the year, while having greater autonomy in selecting whom to observe. One teacher worked in a grade level departmental team composed of only non-tenured teachers. Because all were observing the same day, the teacher did not have the opportunity to see peers teaching the same content, which is what she had hoped to do to gather some ideas related to her curriculum. Another teacher who was having a tough day “management wise” with some

students, wanted to observe a unit colleague with a strong reputation who taught the same students. Furthermore, a teacher who was taking more of a humanities approach in class wanted to observe teachers in other content areas to spark some ideas for her curriculum.

While administrators encouraged teachers to use their preparation period to enter other teachers' classrooms, only one took advantage of the opportunity last year. The two reasons that teachers cited for not taking part in voluntary observations were time limitations and fear of bothering others. As one teacher put it, "I don't want to annoy teachers and be like you know can I come in?" Another teacher noted that there is stigma that if she asked, other teachers may think she is observing because an administrator recommended it for remediation.

Meetings with mentor. Like peer-observations, teachers also identified meetings with mentors as very useful to their development (N=7). Currently, requirements to become a mentor include being a "master teacher" and "good citizen." Administrators selected mentors who have proven themselves to be "knowledgeable, responsible, supportive, and available."

As previously noted, many mentors provided guidance with curriculum, behavioral management, the portfolio, procedures, and the evaluation process. One teacher stated she sent her mentor her portfolio twice, which she received feedback on. She also said she went to him for guidance on the books she was teaching, stating:

So I don't know here's kind of the layout and he's like, 'Oh! I did this and that worked really well.' So I would seek his feedback.

Mentors who worked on the same schedule as their mentees and taught the same curriculum were more available to meet. By contrast, teachers who had mentors who worked on a conflicting schedule faced more obstacles. One teacher described such hurdles:

I probably met her like four times. Nothing consistent. Like I don't meet her once a week or anything like that. But like as I go, like I need to learn how to use Learning Ally, so I met with her after school and she showed me that. She showed me her resources for the novel. I met her once when I had an observation.

While the teacher was still able to seek guidance from her mentor, despite facing scheduling impediments, some new teachers did not meet with their mentors at all. One teacher said, “It's bad to say almost never. I really shouldn't be saying that that.” Another teacher noted:

We were the same grade level. We had you know all the same stuff. It just was she was appeared to be busy and she was a little not organized. But, the only actual thing I was given was a copy of the UBD and a teaching grammar book for eighth grade. And, that was it.

Because of scheduling, some teachers turned to informal mentors who worked within the same unit or department to get help. Others, including special education teachers, were also able to receive help, but struggled finding peers to collaborate with on curriculum.

Evaluative feedback on observations. With the exception of two teachers, all surveyed felt that the evaluative feedback they received was useful or very useful. Interviewees concurred that they valued the feedback, particularly when it was clear, relevant, and manageable. One teacher stated:

It was like everything that they've ever said to me, any feedback they've ever given, it was all put together, you know. There was nothing surprising about what

they said and it was helpful. I took notes and I know that's something that they're going to be looking for next year. So I mean, it's all things that I know are doable and I understand where they were coming from with the feedback.

Indeed, most of the teachers felt like they knew what areas to improve for the following year. One teacher who struggled with management in her first year had a clear idea of what adjustments to make, stating:

So I knew that if I focused on [management] and that was the priority they wanted me to work with and I showed growth in that...I was a little less nervous like going into the next year too just because I like I [could] see the growth right away.

Moreover, because teachers were observed three times formally, in addition to administrative walkthroughs, they could make needed changes within the year. For example, one teacher received feedback that she was not checking for understanding as students read aloud. Thus, the teacher made a conscious effort to pause and reflect more in class, which she modulated based on the book. She noted, “With Shakespeare, which we just started, I would stop all the time” because the English was more difficult to understand.

The teachers were also surprised that they had some say in their evaluation. Because they had completed a reflective digital portfolio, in which they composed prompts and uploaded artifacts, they noticed parts of their work were embedded within their evaluation. One teacher stated, “I didn't expect that. Which is fine, but a lot of...oh, that sounds exactly similar.”

What aspects of induction are perceived to be less effective?

Most of the teachers identified peer-observations, meetings with mentors, and evaluative feedback to be strengths of the induction program. When it came to the other supports of the induction, they generally found some use that they could bring to the classroom, but also pointed out more limitations.

Pop-ins. As previously noted, according to the interviewees, the walkthrough process, which was connected to teacher evaluation, was somewhat inconsistent. Some teachers from a specific department stated that their supervisor did not observe them at all informally. One teacher, in particular, was surprised because she was not retained for the following school year, which she thought would have been cause to receive more feedback. Another teacher who was not rehired, but received more pop-ins, often had to approach an administrator to get feedback. He said:

I would have to seek [the administrator] out to find out any feedback, which...there were a couple times I think I forgot to go find him, and then by the time I realized I didn't, it was too far past, so I was like, yeah, I'll just let that go.

While some teachers were confident because of their formal observations, others were unsure if they were getting rehired because they did not know how administration perceived them.

At the same time, there were instances of teachers who sought feedback and received assistance in the classroom. One teacher asked an administrator for advice on handling a difficult classroom, while another sought feedback on creating developmentally appropriate lessons in her classroom by, “slowing things down a little bit, asking the students not to do too much in one class period.” Indeed, the

administrators helped guide teachers on ways to make adjustments to ameliorate their pedagogy. But, that often required some initiative.

Summer training. The first step in the induction program to help new teachers was summer training, which lasted four days. Second-year teachers were also required to participate in three days of workshops, while third-year teachers facilitated a presentation on *Teach Like a Champion* (2010). Most teachers identified the summer training as useful or very useful to their development in the survey. It was their first opportunity to interact with peers in the same cohort, while learning about the district and school values.

Meanwhile, those who missed the training felt behind at the start of the school year. One stated:

Well I missed new teacher training, so that did have an impact to a degree. There were certain things, I went to new teacher training this summer for the first year, even though I was practically in the second year. There were things that I could probably have benefited from, like maybe little things like PowerSchool, and things like that, that I could have had last year.

Another teacher said, “You get a lot of information...I missed out.” Whereas the first teacher had a teacher coach to rely on to get caught up, the second one felt like she had to bother people for assistance. Furthermore, the workshops in summer training provided professional development on topics that were instructionally valued in the district such as cooperative learning, formative assessment, and metacognitive reading. Many of these topics were sustained through after school workshops, which facilitated additional learning and conversation about strategies.

The teachers interviewed, however, perceived several limitations with summer training. One was that the teachers were inundated with information. First-year teachers

had to attend sessions from eight to four for four days, and as an administrator stated, “It’s demanding and I’m I’m sure to a degree a bit overwhelming, but it needs to get done.” A teacher concurred, stating:

And for me I know part of that is probably just like I spend the whole summer outside as much as humanly possible. And like running all the time so I think it's for me also just physically uncomfortable to suddenly be inside on a chair in the freezing air conditioning. But, for me that's really more is just like it's physically really long day. So I just start to feel fried by the last workshop.

One teacher appreciated the opportunity to attend workshops, but found it difficult to ascertain what to do with the material when she had not yet engaged in her curriculum. Meanwhile, third-year teachers were required to present on a book that they already heard presentations on in their first and second years. In some cases, the teachers had previously read the book in college.

After school workshops. While an administrator stated that summer training was more of a “cursory” overview, the after-school workshops presented additional opportunities to discuss valued instructional topics. Moreover, the workshops were also a chance for veteran administrators or teachers to “model best teaching practices” such as a “do now” and “some kind of exit ticket.” By including the same topic over the course of the year, most teachers found some strategies that they could apply to the classroom. Teachers indicated that they learned ways to differentiate, formatively assess students, embed reading strategies, and implement cooperative learning. As one noted about differentiation:

In general, I’m giving the students options for anything, I've been trying to do that more often because it differentiates ... It gives them an opportunity to choose what they want to do, what they want their project to look like or whatnot. Yeah, so

little things like that. I feel like I'm definitely not an expert at differentiation yet, but I am at least a step above where I was last year.

After taking part in the differentiation workshops, the teacher began assign more work that involved student choice and interest.

While there was some value to the workshops, the teachers also found there to be several shortcomings. One limitation they perceived was that some of the workshops had little pertinence to their content areas. For example, one math teacher discovered some use for reading strategies for word problems. However, she indicated there were times when the training would veer to something entirely different that had no use in a math classroom, stating:

We went on other things such as pre-write strategies and just like I don't ... what is this? And the necessity of it all.

Adding to her frustration was the requirement that she attend additional workshops on the same topic. Another teacher added on that many of the workshops seemed to be more relevant to language arts, stating, "Like the math teachers, the science teachers, they had a hard time. So it was mostly the language arts teachers talking." Those who felt they made great strides in a particular area also indicated that they were frustrated by having to attend so many workshops, which they perceived to be "redundant." Yet, some conveyed that the second and third workshops in a topic created some accountability to share strategies.

Nevertheless, there were workshop topics that were only discussed once. Some teachers also felt these sessions did not necessarily address their needs. For example, one

teacher who worked previously in another district had to take a classroom management workshop. She stated:

I mean we had one meeting about dealing with behavior. For me, I felt it wasn't as helpful. It was like classroom management... But I guess people are coming into this and this is their first experience it might be more helpful. But for me I felt like it was something that I learned already.

Another teacher who attended a session on standardized test skills left feeling even more overwhelmed. She noted:

Yeah I think we all said this like after the PARCC meeting we are all like more overwhelmed than we were before. We were more like OK so all they did was tell us what types of questions were on there. Now I really need to take actually two hours and I just kind of absorbed and started brainstorming how I can implement it into my own classroom. So I think having experienced teachers say this is how I implemented it in my classroom would have been...like made us feel better.

The teacher alluded to an important theme that while the workshops provided invaluable information, the teachers left meetings feeling inundated with resources. Thus, they had to go back and review in order to determine how the material best applied to their classroom.

Portfolio workshops. One of the more demanding tasks of new teachers was the completion of a digital portfolio, which is composed of artifacts and reflective prompts. As a result, three after school sessions were devoted to scaffolding the process. Nevertheless, the feedback from teachers was somewhat mixed. Three first-year teachers found the workshops somewhat useful, while one found it useful, and the other very useful. When it came to second-year teachers, two found the workshops to be slightly useful, two found them to be somewhat useful, one found them to be useful, and another found them to be very useful. For third-year teachers, two found the workshops to be

slightly useful, one found them to be somewhat useful, and another found them to be useful. Most teachers in general found the workshops to be somewhat useful or slightly useful.

Upon interviewing teachers, it became apparent that the first-year teachers took more from the workshops. Because it was their first time completing a reflective portfolio, the task seemed more daunting. Without the workshops, the teachers intimated that they probably would have procrastinated, which would have been detrimental because they had to collect some data months in advance. Moreover, the workshops helped the teachers grasp the requirements for each standard. In addition, teachers appreciated receiving model prompts to help spur reflection and writing. As one teacher alluded to, “There’s so many components to it and it’s just helpful to see what people have done in the past.”

By the second and third-years, however, teachers exhibited some frustration at having to attend almost the exact same workshops as the year prior. While they valued check in points for accountability, they wanted more time to work individually within a group setting so they could share ideas with one another. As one teacher stated:

Yeah. I think a lot of us could benefit from more allotted time from the administration or the PD team to give us time, nothing against PD. Just to give us more time to work on it, and talk about it. We have three non-tenured portfolio meetings. I don't know if that's enough. I think we could meet more often to talk about that because it's such a big important part of our non-tenure career. I think the more we talk about it, I think innately the earlier people will work on it, and the better the portfolios would be. We had three formal sessions with administration...Once the month of February rolled around, one of or two of us volunteered to just hold these impromptu little gatherings where we're all just going to work on it together. To be honest, that was kind of helpful. We were all sitting together talking about it, and working on it. Not just talking about it, we were working on it together.

So while the teachers liked having three sessions, they hoped to use the time somewhat productively to address the prompts, while collaborating on ideas.

Weekly collaborative meetings with departmental colleagues. Like the portfolio meetings, some struggled with utilizing collaborative meeting time. As indicated previously, new teachers who had difficulties with curriculum and assessment turned to their departmental colleagues in their grade level. Colleagues were willing to share and model what they had done in the classroom, which provided a blueprint to follow or modify as needed. Yet, in the surveys not everyone found the collaborative time to be useful. Upon looking at the interview data, it became apparent that some teams lacked collegiality, while others, by contrast, remained more open. One teacher who switched middle schools indicated that her original team rarely met, so the teachers instead attended to their individual responsibilities.

Another teacher expressed reluctance with his group because there was no reciprocity when it came to sharing materials. He found that other teachers would take his work verbatim, even for formal observations. The teacher was concerned because there was no established norm for giving credit. He stated:

Basically, they took my lesson plan and used it for an observation. And I was very angry about that because I worked really hard on it and they took it and didn't get me anything back.

Thus, the potential for a collaborative team to act as a support for new teachers hinged on whether the teachers trusted one another.

Summary of Teacher Perception of Induction Supports

Overall, the teachers who were interviewed and surveyed responded more positively to peer-observations, mentoring relationships, and evaluative feedback. The peer-observations advanced an opportunity for teachers to capture teaching and learning, while mentoring relationships provided support in curriculum, behavioral management, and observation and evaluation. Furthermore, the evaluative feedback teachers received for the most part was clear, concise, and easily applicable to the classroom.

While most teachers found the other induction supports at least somewhat useful, they perceived them to have more limitations. First, short administrative walkthroughs did not necessarily provide some teachers with the validation they were looking for. Second, summer training, which presented an opportunity to interact with colleagues and learn from professional development workshops, seemed to be an overwhelming experience for first and second-year teachers and a redundant one for third-year teachers. Third, after-school workshops exposed teachers to best teaching practices that were valued in the district, but at times they seemed more catered to language arts. Fourth, the portfolio workshops effectively scaffolded completing a digital portfolio, but second and third-year teachers who already had experience with the task preferred structured time to work with their peers.

Legitimate peripheral participation. From evaluating each of the induction interventions, it is evident that teachers found peer-observations, mentoring, and evaluative feedback to be more useful because they were relevant to the teachers' needs or sustained throughout the year. All three connect well to Lave and Wenger (1991) conception of Legitimate Peripheral Participation as an apprenticeship model. By

observing expert colleagues at work, apprentices can learn a trade more expeditiously and effectively, which holds true for teaching. Indeed, watching classroom practices firsthand proved to be invaluable professional development for teachers. Nevertheless, as a one-time experience, teachers hoped to take part in more peer-observations and select who they wanted to observe to learn strategies that were pertinent to their needs. Evaluation and mentoring, on the other hand, were perceived to be effective because they provided sustained opportunities for conversations with experts about teaching and learning. With written evaluations, teachers could sense progress from one observation to the next.

The other interventions, on the other hand, had structural limitations or seemed more disconnected to the classroom. For example, while many teachers found departmental teams to be useful for curriculum planning, other teachers had trust issues or rarely met, which meant that new teachers had limited access to expert colleagues. The other interventions, including summer and after school workshops, taught strategies, but they did not necessarily focus on teachers' challenges. Aside from a formative assessment workshop, no teacher mentioned a training session as a means to address a classroom related issue, which suggests that informal interactions played more of a role in shaping teachers' development. Thus, when designing induction from Situated Learning lens, it is important to consider whether it allows a new teacher to serve in an apprenticeship role to an expert.

Limitations

In light of the findings, there were several limitations. One was that I worked in the building as a colleague of the research participants. I found that my professional role

avored me at points, while serving as a hindrance at other times. Teachers who know me well were more willing to share their experiences, while some of the other teachers were somewhat more hesitant. Although I found the first round of interviews to be challenging, I noticed that in the one-legged informal conversations and second round of interviewees, many of the teachers who were initially more reticent began to reveal more. This was a risky endeavor for them, particularly for the ones whose contracts were not renewed.

Another limitation was that I generalized the findings. Just like the induction program generalized what areas teachers needed support in, I found what commonalities existed for first, second, and third-year teachers, which proved somewhat demanding. As a result, when I interviewed second-year teachers who described their first year, I incorporated the quotes into my first-year evidence when I grouped the qualitative data. Likewise, when I interviewed third-year teachers who described their first and second years, I also embedded the quotes into first-year evidence and second-year evidence. Overall, there were some themes that I could extract from the teachers, but it is important to note that there was a personalized dimension of each teacher that was not necessarily captured. Indeed, each teacher had his/her own unique experiences and challenges within the school.

Chapter V

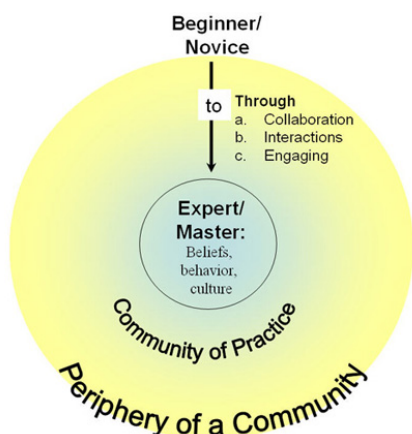
Discussion and Recommendations

In this concluding chapter, I briefly summarize the findings, describe the connection of the study to Communities of Practice and Legitimate Peripheral Participation, and make recommendations for how to optimize induction using the aforementioned theory. On the next two pages are tables that summarize the findings for each question.

Those who ascribe to Situated Learning Theory believe that learning occurs consciously and unconsciously through activity, context, and culture (Lave & Wenger, 1991). Perhaps most significant to the transmission of learning within an organization are collegial relationships. Lave and Wenger (1991) contend that those who are newcomers learn best from interactions with seasoned colleagues in what they term Legitimate Peripheral Participation. As novices interact more with mentor figures, the former move on a path toward becoming experts. Below is an image that reflects the LPP metaphor.

Figure 4

Legitimate Peripheral Participation (Southalabama.edu, n.d.)



Summary of Findings

Table 3

Question 1 Findings

	Administrators	Teachers
How do the research participants describe the new teacher induction program?	<ul style="list-style-type: none"> • Described the importance of hiring and evaluation as part of the program • Articulated how comprehensive the program is with ample learning opportunities and support for teachers 	<ul style="list-style-type: none"> • Felt supported throughout non-tenured experience • Had difficulty conveying what supports were provided (fragmented view).

Table 4

Question 2 Findings

In what ways does the new teacher induction program help first, second, and third-year teachers address their challenges?	Challenges	Ways the Induction Program Addressed the Challenges	Even with assistance, what challenges do new teachers face?
First-Year	management, formative assessment, school procedures, and curriculum	mentors, unit colleagues, supervisors, workshops, and grade level departmental peers	procedures, curriculum for some departments
Second-Year	lesson planning and curriculum, shared planning in inclusion classes, reaching struggling learners, Pressure to perform	unit colleagues, grade level departmental peers	planning time for mainstream and special education teachers, curriculum for some departments
Third-Year	refining and taking risks in the classroom	grade level departmental peers	None

Table 5

Question 3 Findings

Question	More Effective	Effective (With Some Limitations)
What aspects of new teacher induction are perceived to be most effective? What aspects are perceived to be less effective?	peer-observations, mentoring relationships, evaluative feedback	summer training, after school workshops, portfolio workshops, administrative walkthroughs, grade level departmental teams

Unfortunately, the reputation of the American school is one in which teachers are alone to tackle their problems within their classrooms (Tyack & Cuban, 1995). Hence, some assert that teaching is an egg crate model that “cannibalizes its young” (Ingersoll, 2001). Administrators and experienced professionals, however, can design an induction program that regularly embeds collaboration between new teachers and experienced colleagues to alleviate attrition and expedite development.

At my middle school, there was a plethora of ways for such interactions to occur. New teachers were assigned formal or informal mentors. Many worked in a unit of teachers to discuss student related issues. Many had weekly time to collaborate with departmental colleagues, while all were subject to evaluative feedback from administrators. All, meanwhile, had opportunities to connect with others through workshops and peer-observations. Rather than create a plan to remediate the induction program, therefore, the remaining parts of this chapter will detail some ways to strengthen the social links within the school, particularly between expert and novice teachers.

1. Expand the selection criteria for mentors to include scheduling and curriculum.

New teachers in the school, regardless of experience, were assigned a mentor, which is going beyond state regulations that require teachers to have a mentor only if they are new to the profession (NJ Department of Education, 2014). The administrators selected the mentors utilizing criteria such as mastery in teaching, availability, and professionalism. According to the literature, new teachers prefer mentors who are caring, accommodating, and trustworthy (Locascio et al., 2016).

The findings of this study matched the research base on why mentees sought out their mentors (Abell et al., 1995; Buchanan et al., 2013; Jorissen, 2013; LoCascio et al., 2016; Paris, 2013). Mentors possessed a strong knowledge of strategies to reach students. They had a variety of curriculum materials, assessments, and other materials that new teachers could readily adopt or modify. They helped out with interpreting and responding to feedback on evaluations. Finally, they were available to address classroom related issues that required problem-solving. For example, one teacher regularly visited her mentor to receive help with management issues.

However, the findings also confirmed that mentors and mentees who worked on the same schedule and taught the same curriculum met far more frequently. Teachers, by contrast, who had conflicting schedules either met infrequently, or did not meet at all. As Johnson (2007) alludes to, mentors and mentees ideally should be in close proximity, teach the same curriculum, and share planning time to cultivate a productive relationship. As a result, the criteria for selecting a mentor at my school should transcend being a “master teacher” and “good citizen” to factor in curriculum and scheduling.

For core curriculum teachers in mathematics, science, social studies, or language arts, the mentors should be veteran colleagues who teach the same curriculum and work on the same schedules as their mentees. There may, on the other hand, be some hindrances to assigning mentors to special education, foreign language, and other encore teachers. In this case, administrators should take advantage of the fact that there are two middle schools, and set up videoconferencing technology so teachers can videoconference with peers who are on the same schedule and teach the same curriculum. If this is not possible, administrators should opt for mentors who have the same schedule as their mentees, but do not share the same curriculum. Based on the research, if there has to be choice, it is more fruitful to have mentors who were in close proximity and available for help during preparation periods than mentors who teach in the same area but are not close by with a common schedule.

2. Provide a basic overview of school procedures during new teacher training.

It was also apparent that teachers made mistakes related to school procedures. Examples included assigning vocabulary test words late, not understanding the Bring Your Own Device policy, and missing progress reports. As a result, teachers perceived that they would benefit by spending more time on an overview of the school that included learning about key locations, drills, and requisite online programs for the job.

In the literature, modal reasons cited for leaving the teaching profession are issues related to low pay and the organization and management of teaching (Ingersoll, 2001). Teachers often do not know where to find resources (Lloyd & Sullivan, 2012; Westervelt, 2016), which can impede their progress. Essentially, teachers at the middle school had to spend time figuring out logins or how to utilize and unjam the copy machine. The time

and decision-making could contribute to feeling overwhelmed about the nature of the profession, while distracting the teachers from what they should have been doing, which is determining ways to best impart the curriculum to students.

Furthermore, the study corroborated the research literature in that teachers were somewhat reluctant to ask for help (Johnson, 2007). Hence, there are a couple of ideas for remedying struggles with school protocols that involve utilizing summer training time. One is to block time for mentors and mentees to tour the building and review key professional responsibilities that are critical in the first few weeks of school. Another is to assign second and third-year teachers to lead first-year teachers in the tour primarily because they have just undergone the first-year experience and have keen insights on being a new teacher. Furthermore, by allowing second and third-year teachers to direct first-years, the school is cultivating a culture of shared leadership (Johnson, 2007).

3. Provide time for mentors and mentees to review the curriculum prior to any workshops.

Cohen and Ball (1999) assert most new teachers receive little guidance on curriculum. As a result, they have to interpret and translate curriculum materials for students, which can lead to dependence on short-term planning (Borko & Livingston, 1989). Despite the fact that teachers have a standards and curriculum guide to follow, they still felt a necessity to consult with their colleagues about decisions related to lesson plan ideas, pacing, and assessment. Often times, these consultations did not occur until the school year began. Meanwhile, teachers had already taken a number of professional development workshops during summer training.

However, a prerequisite to learning from workshops is having a rudimentary understanding of the curriculum. Because much of the learning is contextualized in the classroom (Putnam & Borko, 2000), teachers who do not know what they are teaching will not know how to implement the major takeaways from training sessions. Consequently, mentors and mentees should be provided with time to meet either before summer training, or at the beginning of summer training before the commencement of any workshops. Furthermore, by establishing a rapport prior to the school year, mentors and mentees can begin to form a collegial relationship with one another, which may set a precedent for future expert-novice interactions. New teachers who have looming concerns may thereafter feel more comfortable approaching their mentors for assistance.

4. Shorten the duration between initial and follow-up workshops.

While summer training provided a cursory overview of upcoming professional development, the after-school workshops allowed time to explore topics in greater depth. However, some of the follow-up workshops were so far into the school year that teachers forgot about what they had learned initially. On the one hand, an effort was made to sustain conversations about relevant topics, but on the other hand, the gap in time made it difficult for teachers to share how they implemented the learning. In reality, many had left the summer workshops and forgot about what they learned. Some, who took steps to apply what they learned, spent time individually after school reviewing the workshop materials. However, it was far more common for teachers who were overwhelmed to prioritize tasks that were unrelated to the workshops.

As the research alludes to, the drive-by workshop model is ineffective at eliciting change in instruction (Garet et al., 2000; Darling-Hammond et al., 2009). Thus, a follow

up workshop should occur no more than two months after the initial one. Even then, facilitators should strive to sustain learning by communicating with participants in between workshops in person or through email. Learning and application can only occur through ongoing discussion of topics in Communities of Practice (Lave & Wenger, 1991).

5. Create more opportunities for formal and informal peer-observations.

Building Communities of Practice also involves creating opportunities for observation for newcomers. While most professional development sessions teachers attended were removed from the classroom, peer-observations, by contrast, provided models for teachers to view colleagues who were master teachers at work in their practice contexts. The fact that teachers could see good teaching occur led the research participants to believe that it was a very strong component of the induction program. Furthermore, the teachers who were interviewed hoped to extend such opportunities by viewing unit colleagues who taught the same group of students, or others who possessed some niche mastery.

Despite the teachers' exuberance, peer-observations only occurred formally on one day. As a job-embedded form of professional development, however, they should have been sustained over the course of the school year. Granted, it is difficult to pay substitutes to cover classes, while also organizing debrief sessions, but there are ways to incentivize teachers. One is to create a network of teachers who are willing to be observed. By developing a network of teachers who have expressed a willingness to assist, new and veteran teachers may feel more secure approaching their colleagues.

Even though administrators encouraged teachers to observe during their preparation periods, no one took the initiative to do so. Teachers were limited in their

time or worried about the stigma that asking colleagues to observe would signify a need for help or corrective action. Another way to get teachers to volunteer their time, however, is by offering professional development hours. Teachers who observe colleagues, and have a post conference discussion should have that work reflected on a PD transcript, which may be more valuable than traditional workshops and trainings that are credited with PD hours.

Furthermore, the research seems to confirm the effectiveness of peer-observations (Little, 2006). From a theoretical standpoint, observation is linked to developing self-efficacy (Hoy & Spero, 2005). In addition, the intent of professional development is to focus on the skills connected to teaching and learning (Darling-Hammond, et al. 2009). There is only one place where teachers can see those interrelated processes occur, which is in the classroom. While some workshops may seem irrelevant, teachers who select colleagues to observe will have fewer difficulties finding pertinent connections to their classes. In addition, although professional development should be connected to practice, relevance alone is insufficient to guarantee improved practice. Professional development also has to be intensive and ongoing (McCann, Jones & Aronoff, 2012). Thus, while it is commendable that the school implemented a day of peer-observations for new teachers, some efforts should be made to open up the learning community to even more visitations.

6. Encourage grade-level departmental teams to develop norms to create trust.

During the school year, core academic teachers also met with their grade level departmental colleagues. For many new teachers, these meetings were a means to receive help with resources, curriculum, and assessment. However, there were several who stated that they took part in teams that did not necessarily work collaboratively to

address issues of teaching and learning. One noted that she was on a team that rarely met, while another indicated that colleagues took his work without proper accreditation. Not crediting work, for example, may produce feelings of resentment, and consequently discourage cooperation (Hargreaves, 1991).

However, instances of contrived collegiality could have been avoided if teachers collectively established norms to guide team behavior and build trust. While it is vital for new teachers to engage collaboratively with experienced veterans, they must first engender trust in one another. Coburn and Russell (2008) suggest that trust is an essential factor in establishing professional relations. Mentoring cannot occur without it, (Yusko & Feiman-Nemser, 2008), and in one study, teachers who sensed a trustful work environment, grew more in their pedagogical and content expertise (Biomeke et al., 2015). Thus, there seems to be a strong link between trust and professional learning and development. As Situated Learning Theory suggests, collegiality and social capital are critical to developing expertise (Lave & Wenger, 1991).

Establishing norms is the first step in building trustful relationships. Based on the findings, grade level content teams were often the first line of defense for curriculum, planning, and assessment issues. It would be a disappointment if novice teachers missed out on this opportunity because of workplace politics that limited the establishment of trusting relationships.

7. Engage in more reflective dialogue.

Thus far, much of the discussion has focused on induction support for new teachers. Teachers who had classroom management difficulties, for example, approached their mentors for help, while peers who experienced challenges with curriculum sought

assistance from grade level departmental colleagues. However, upon interviewing third-year teachers, it was evident that they had advanced beyond survival concerns to refining and mastering their capacity to effectively teach the curriculum. Management also did not seem to pose as much of a challenge as it had for the teachers during their first two years in the profession.

While both third-year teachers expressed that they had strong collaborative ties, their dialogue with colleagues tended to lean more to planning and curriculum implementation. Thus, many discussions centered on future classroom activities; on the other hand, the literature asserts that teachers should also engage in reflective discourse (Ball & Cohen, 1999). Mentors and mentees can work collaboratively to analyze student work, teacher work, assessment, curriculum, or class sessions captured on video. Other literature suggests that reflective dialogue can occur within teacher workgroups such as Professional Learning Communities (Dana & Yendol-Hoppey, 2008), or Critical Friends Groups (Curry, 2008). One teacher, for example, may bring an artifact of student work from his/her class, while his/her colleagues may take turns asking questions, articulating observations, and making recommendations to help the student.

Reflective dialogue, furthermore, aligns with taking an inquiry of stance (Cochran-Smith & Lytle, 1999), in which teachers construct and reconstruct pedagogical knowledge through social interactions based on records of practice. In addition, such interactions facilitate the completion of the portfolio, which requires teachers to upload artifacts and compose prompts that pertain to the Stronge Evaluation Standards. If teachers make a habit of reflecting on practice, they may find it easier to write in

response to reflective prompts. As it stands, the findings of the study elucidated that the portfolio was overwhelming, which impelled some to procrastinate.

8. Establish monthly check-ins with first-year teachers.

The final recommendation is to implement monthly check-ins with first-year teachers. While more meetings may seem daunting, an administrator indicated that he took part in the practice in the past, noting:

You know we got, I used to do a monthly non-tenure check, I stopped doing that just in individual time. Just to see how folks are transitioning, I may bring that back. Just trying to be mindful of how much time we're like planning for people like going to another meeting so, but I enjoy having that one-on-one time with them. It wasn't evaluative. It's kind of like how you doing. You know what I didn't do it this year and I'm looking to probably bring that back next year.

By reestablishing monthly meetings, administrators can see how each teacher is doing personally and professionally, which aligns with teachers' perceptions that they should receive more informal and ongoing feedback. As some indicated, they did not have enough of a gauge of their progress from their formal observations.

Tschannen-Moran and Spero (2007) found that limited, sporadic feedback had minimal effect on teachers' self-efficacy. Johnson (2007), moreover, asserts that new teachers often look to their principals for guidance, but are disappointed when their principals are unavailable. By implementing monthly check-ins, principals can be more responsive, while teachers may not feel like they are in limbo. Furthermore, administrators can find a balance between giving formative and evaluative feedback. The former may allow principals to build trust with teachers, who may feel like they are privy to expertise, as opposed to uncertain about their future.

Conclusion

In summation, the induction program helped many new teachers forge connections with experts who facilitated learning and development. Still, based on the research there are ways in which some of the connections could be strengthened. First, administrators should place significant weight on scheduling and curriculum when assigning mentors who are available to mentees. Second, prior to summer training, mentors and mentees should meet to peruse the curriculum and discuss other job considerations. Third, upon completing summer training, teachers should have a rudimentary understanding of school procedures, and know who to contact when they are facing professional challenges. Fourth, the period between initial and follow-up workshops should be shortened to maximize learning. Fifth, there should be attempts to station job-embedded forms of professional development such as peer-observations throughout the year. Sixth, teacher workgroups should develop norms for sharing to build trust and elicit collaboration. Seventh, more time in teacher workgroups should be spent on reflective dialogue to embed inquiry based professional development. Finally, an administrator should meet with each first-year teacher monthly to provide formative feedback and hear concerns.

Even with the recommendations, however, there are still some limitations within the school context. Teachers who teach encore, foreign language, or special education classes tend to lack colleagues who teach the same content. As a result, they are more isolated in their practice. In addition, based on the schedule, there is limited time for general and special education teachers who share classes to plan with one another. Nevertheless, there is already an attempt to limit special education teachers' number of

classes to prepare for. Thus, teachers have to be creative and productive within the time constraints of the school day.

When it comes to applying these findings outside of the school context, it is perceived that they are still generalizable because they tend match the research literature (Johnson, 2007). Indeed, new teachers often struggle with management, assessment, curriculum, and a lack of support. Consequently, those who are fortunate tend to receive expert help in the form of a mentoring, collaborative teams, and/or administrative support. However, more studies are needed to confirm the applicability of these recommendations for the challenges that are relevant to first, second, and third-year teachers. Since each teacher faces unique circumstances, educational experts should investigate in the future how induction programs can personalize learning and development.

Yet, from a Situated Learning perspective, the evidence seems strong that teachers who regularly interact with expert colleagues are in a position to grow as educators, perhaps transcending from floaters to swimmers. All of the teachers in the study were fortunate to find at least one person to engage with collegially. Most, however, found more, and the relationships they cultivated became their most meaningful strategy for addressing professional challenges.

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Appendix A: Email Eliciting Participation

Subject Headline: Research Study

Hello _____,

I am currently in graduate school writing my dissertation on a case study analysis of the new teacher induction program; the research will be utilized to help make recommendations for improvement. In order to complete the study I have to interview new teachers. _____ recommended you as potential participant because you are articulate and would provide quality feedback on the program. Just so you know, any answers you give would be kept confidential. Please let me know if you would be interested in helping. Once I hear back from you, I can provide you with more information. Thank you for your consideration!

Sincerely,

Jack

Appendix B: Informed Consent Form and Audiotape Addendum

INFORMED CONSENT FORM

Principal Investigator: Jonathan Medina

Project Title: New Teacher Development in a Suburban Middle School: How to Enhance a Developed Induction Program

Dear Participant,

You are invited to participate in a research study that is being conducted by Jonathan Medina, a student at the Rutgers Graduate School of Education. The purpose of this research is to conduct a case study evaluation of the new teacher induction program.

It is anticipated that two administrators will participate in one 30 to 45 minute interview, while six teachers will participate in two interviews that are also 30 to 45 minutes each. Participation in the study will involve the following: agreeing to the interview, signing the consent form, and taking the time to answer the researcher's questions.

This research is confidential, which means that the research records will include some information about you and this information will be stored in such a manner that some linkage between your identity and the response in the research exists. Some of the information collected about you includes your teaching experience and content area expertise. Please note that we will keep this information confidential by limiting any individual's access to the research data and keeping it in a secure location on Google Drive.

The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. All study data will be retained for three years to adhere to data storage regulations.

There are no foreseeable risks in participating in this study, while the benefits include informing new teacher development and enhancing the induction program. However, you may receive no direct benefit from your participation.

Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not comfortable.

If you have any questions about the study or study procedures, you may contact me in person at work, by phone at 973-454-0936, or by email at Jonathan.Medina@gse.rutgers.edu.

You may also contact my faculty advisor, Dr. Angela O'Donnell, at

Dr. Angela O'Donnell

10 Seminary Place, Room 324

New Brunswick, NJ 08901

Angela.Odonnell@gse.rutgers.edu

848-932-0830

If you have any questions about your rights as a research subject, please contact an IRB Administrator at the Rutgers University, Arts and Sciences IRB:

Institutional Review Board
Rutgers University, the State University of New Jersey

Liberty Plaza / Suite 3200

335 George Street, 3rd Floor

New Brunswick, NJ 08901

Phone: 732-235-9806

Email: humansubjects@orsp.rutgers.edu

You will be given a copy of this consent form for your records.

Sign below if you agree to participate in this research study:

Subject (Print) _____

Subject Signature _____ Date _____

Principal Investigator Signature _____ Date _____

Audio/Visual Addendum to Consent Form

You have already agreed to participate in a research study, **New Teacher Development in a Suburban Middle School: How to Enhance a Developed Induction Program**, conducted by **Jonathan Medina**. We are asking for your permission to allow us to **audio record** as part of the research study, although you do not have to agree to be recorded in order to participate.

The recording(s) will be used **to gather data to inform the middle school induction program**.

The recording(s) will include your name, but the audio files will only be accessible to the researchers. If you say anything that you believe at a later point may be hurtful and/or damage your reputation, then you can ask the interviewer to rewind the recording and record over such information OR you can ask that certain text be removed from the dataset/transcripts.

The recording(s) will be stored ***on the principal investigator's phone. Thereafter, it will be transferred to the principal investigator's Google Drive account, while the phone recording will be deleted.*** The recording(s) will be kept for ***three years in adhering to data storage regulations, at which point it will be permanently deleted because of the study's completion.***

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Subject (Print) _____

Subject Signature _____ Date _____

Principal Investigator Signature _____ Date _____

Appendix C: Semi-Structured Protocol for Administrators

Hello (insert name of participant):

Thank you for taking the time to talk with me. If you don't mind I will be recording the interview on my phone so I can look at the data later in more depth.

The purpose of this interview is to get your perspective on the induction program. The interview will take approximately 30 to 45 minutes and will focus on your experiences facilitating the induction program and new teacher development.

1. Would you mind describing the hiring process? Are the teacher candidates you recommend for hire typically good matches for the school?
2. In what capacity have you worked with new teachers?
3. What challenges do you feel new teachers face? Can you discern any differences in the challenges experienced by first, second, and third-year teachers?
4. What role have you played in designing the new teacher induction program?
5. In what ways has the program changed over the last several years? What caused these changes?
6. What do you see as the key supports provided through the new teacher induction program?
7. To what extent do you feel the program has been successful? How do you know?
8. In what ways is the program challenged to support new teachers? What do you feel they struggle with that the program can't or doesn't address?
9. What professional development experiences do you perceive to be most useful for new teachers (induction or general)?
10. What professional development experiences do you perceive to be least useful (induction or general)?
11. In what ways have you seen new teachers develop in their instruction? Can you link their development back to the support provided in the induction program?
12. What limitations do you find in your role in supporting new teachers?
13. Would you be able to recommend two first-year, two second-year, and two third-year teachers who are articulate and can provide quality feedback on the induction program?

Appendix D: Semi-Structured Protocol for First-Year Teachers (First Set)

Hello (insert name of participant):

Thank you for taking the time to talk with me. If you don't mind I will be recording the interview on my phone so I can look at the data later in more depth.

The purpose of this interview is to get your perspective on your development as a teacher and discuss your experiences in the school induction program. The interview will take approximately 30 to 45 minutes.

1. What is it like being a first-year teacher in the school?
2. What challenges do you face as a new teacher?
3. How do you go about addressing those challenges? Are there any problems that you still face?
4. What area do you think you need the most support?
5. Do you rely on colleagues for support? In what ways? How often do you discuss classroom issues with them?
6. What professional development experiences does the school provide to you as a new teacher?
7. What experiences do you perceive to be most useful in helping you address challenges?
8. What experiences do you perceive to be less useful?
9. What advice, if any, would you give to administrators about changing the induction program for first-year teachers?

Appendix E: Semi-Structured Protocol for Second-Year Teachers (First Set)

Hello (insert name of participant):

Thank you for taking the time to talk with me. If you don't mind I will be recording the interview on my phone so I can look at the data later in more depth.

The purpose of this interview is to get your perspective on your development as a teacher and discuss your experiences in the school induction program. The interview will take approximately 30 to 45 minutes.

1. In what ways are you different as a teacher this year than in your first-year?
2. What are your main challenges as a second-year teacher in the district?
3. How do you go about addressing those challenges? Are there any problems that you still face?
4. What area do you think you need the most support with this year?
5. Do you rely on colleagues for support? In what ways? How often do you discuss classroom issues with them?
6. What professional development experiences does the school provide to you as a new teacher?
7. What experiences do you perceive to be most useful in helping you address challenges?
8. What experiences do you perceive to be less useful?
9. What advice, if any, would you give to administrators about changing the induction program for second-year teachers?

Appendix F: Semi-Structured Protocol for Third-Year Teachers (First Set)

Hello (insert name of participant):

Thank you for taking the time to talk with me. If you don't mind I will be recording the interview on my phone so I can look at the data later in more depth.

The purpose of this interview is to get your perspective on your development as a teacher and discuss your experiences in the school induction program. The interview will take approximately 30 to 45 minutes.

1. In what ways are you different as a teacher this year than in your first and second year?
2. What are your main challenges as a third-year teacher in the district?
3. How do you go about addressing those challenges? Are there any problems that you still face?
4. What area do you think you need the most support with this year?
5. Do you rely on colleagues for support? In what ways? How often do you discuss classroom issues with them?
6. What professional development experiences does the school provide to you as a new teacher?
7. What experiences do you perceive to be most useful in helping you address challenges?
8. What experiences do you perceive to be less useful?
9. What advice, if any, would you give to administrators about changing the induction program for third-year teachers?

Appendix G: Interview Notes Protocol**Interview Observation Protocol**

Name	
Location	
Participant Demeanor	
Reflection of Points That Stand Out	

Appendix H: Professional Development Observation Protocol

Workshop Observation Protocol

Title _____

Scheduled Time

Number of Participants (Circle One):

1-5

6-10

11-15

15-20

Sketch of Library Setting:

Time Spent Passively Listening: _____

Time Spent Actively Engaging/Discussing:-

Workshop Notes:

Participant Demeanor:

Reflection on Role as Researcher:

Relevant to Practice?

Yes

For Some

No

Explanation:

Addressed classroom problems?

Yes

For Some

No

Explanation:

Salient Points Reflection:

Appendix I: Sample Third-Year Teacher Survey

Please indicate how useful each of the following PD opportunities were to your development as a teacher.

Form description

Teach Like a Champion Book Study

	1	2	3	4	5	
Not Useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Useful

Peer-Observations

	1	2	3	4	5	
Not Useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Useful