NOVICE TEACHERS’ SELF-EFFICACY AND INSTRUCTIONAL PRACTICE:
EXPLORING THE PERCEIVED IMPACT OF A MULTI-YEAR INDUCTION PROGRAM

BY

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ABSTRACT

Developing instructional competence and self-efficacy—as with mastery of any occupation—may take years of practice. However, most districts only offer one year of induction support (Davis & Higdon, 2008; Ingersoll & Kralik, 2004). Multi-year induction programs—and studies about how these multi-year programs might influence self-efficacy and instruction—are extremely rare. I currently serve as an administrator in a New Jersey district with a four-year induction program. The purpose of this qualitative evaluation case study was to consult the district’s second, third, and fourth-year teachers to explore their perceptions of the multi-year induction program and how they felt it influenced their self-efficacy and instructional practice.

The research question guiding the study was: From a novice teacher’s perspective, in what ways does the multi-year induction program in the Robbinsville School District contribute each year to changes in his/her self-efficacy and instructional practice?

Data collection included focus groups and anonymous surveys for each cohort of teachers as well as professional development evaluation forms to compare and contrast how each year of induction might have influenced teachers’ perception of their self-efficacy and instructional practice. Five themes related to the contribution of the multi-year program were identified. First, participating in the multi-year program communicated to teachers that mastery developed over time. Second, having multiple years to refine their instructional practice enabled teachers to feel more comfortable taking risks with new instructional strategies and teacher leadership. Third, the program helped novices to develop instructional strategies as they progressed through each year of the program. Fourth, the induction process encouraged novices to “bridge the divide” in an isolating profession and build relationships with fellow cohort members, veteran colleagues, and administrators. Finally, inducted novices routinely sought vicarious experiences to improve their
MULTI-YEAR TEACHER INDUCTION PROGRAM

instruction and self-efficacy. Suggestions for improvement included providing more choice in professional development, helping administrators and mentors become more aware of novices’ needs, and offering additional opportunities for vicarious learning. Study participants consistently reported that the four-year program, though it required more responsibilities than a traditional one-year program, positively influenced their self-efficacy and instructional practice each year. Findings from this study will provide insight on how to improve the design and implementation of this, and possibly other, multi-year induction programs.
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CHAPTER I

Introduction

All professions experience attrition. A functioning economy encourages competition and allows employees to seek opportunities elsewhere. Yet some attrition rates can be alarming; research has shown that by the fifth year of teaching approximately 30%-50% of educators either switch schools or leave the profession altogether (Ingersoll & Smith, 2003; Smith & Ingersoll, 2004). Teachers may leave their positions for numerous reasons, from not having enough administrative support and resources, to low salaries and feeling ineffective in their instructional practice and classroom management. Regardless of the reason for departure, a “revolving door” of educators, “negatively impacts student learning because of its relationship to school cohesion, and in turn, performance” (Ingersoll, 2001, p. 505).

If staffing is always in a state of flux, a school’s attention is focused upon adjustment and acclimation instead of student learning. Building administrators spend much of their valuable time interviewing and selecting candidates, co-teachers have to become acquainted each year with their new colleagues, and new hires must navigate (and may often struggle with) school procedures, unfamiliar curriculum, and students. Therefore, many novices are distracted and leaders are unable to ensure that their faculty shares the same vision for student achievement and success. For all of these reasons, it is important to find ways to retain teachers.

Before deciding how to keep teachers in the classroom, schools have to determine which of their teachers are most likely to leave. Despite differences in individual teacher and school demographics, various studies have concluded that, “one very stable finding is that attrition is high for young or new teachers and lower for older or more experienced teachers” (Guarino, Santibanez, Daley, & Brewer, 2006, p. 200). Research shows that there is a U-shaped plot of
attrition in regards to age and experience, departing educators are usually very young or close to or at retirement age. The U-shaped plot applies to all settings; suburban and urban, poor and affluent, low and high minority populations, and successful and struggling schools (Borman & Dowling, 2008; Guarino et al., 2006). This departure of novices is often due to their “sink or swim” introduction into the profession. As Borman and Dowling (2008) assert, “teaching, as a profession, has been slow to develop a systematic way to induct beginners gradually into a highly complex job” (p. 397).

In Lortie’s (1975) historic mixed methods study of school teachers in Florida and Boston, he noted that novices were expected to immediately assume full responsibility for classroom instruction and management, even though they had only had one or two student teaching experiences. He asserted, “Tasks are not added sequentially to allow for gradual release in skill and knowledge; the beginner learns while performing the full complement of teaching duties” (p. 72). Despite their inexperience, novices have the same basic responsibilities as their veteran, more seasoned peers. Even worse, novices are desperate for knowledge but spend most of their time confined in their classrooms and physically apart from their colleagues who might be able to provide some needed know-how. Lortie (1975) found that the majority of novices preferred to work in isolation so no one would know about their mistakes or struggles. His findings about the novice teachers’ experiences are echoed in more contemporary research studies; beginning teachers still take on immediate and full responsibility for a classroom and still struggle with feelings of isolation and incompetence that lead them to leave the profession (Billingsley, Carlson, & Klein, 2004; Fry, 2010; Schlichte, Yssel, & Merbler, 2005; Smith & Ingersoll, 2004).

In an effort to better support and retain novice teachers, new teacher induction programs have become a nationwide norm; nearly 80% of American first-year teachers participate in some
kind of formal induction program (Smith & Ingersoll, 2004). The purpose of induction programs is to provide opportunities for novices to hone their teaching skills and become part of the school community. Induction programs generally occur during the first year of teaching and can include mentoring experiences, professional development opportunities alongside other novices, reduced workloads, and multiple classroom observations to promote reflection.

One goal of induction is to develop self-efficacy, or the belief that one can succeed in a given situation (Bandura, 1997). For educators, self-efficacy means believing that one has the disposition and skills needed to competently design lesson plans, handle classroom management, assist struggling learners, and communicate with community members, parents, colleagues, and students. Research indicates that a high sense of self-efficacy leads to enhanced performance, increased student achievement, and higher teacher retention (Leithwood & Jantzi, 2008). Therefore, the assumption is that successful induction programs can increase self-efficacy and, as a result, teacher retention.

Even when teacher induction programs are in place, teacher flight still occurs, in part, because many induction programs are haphazard and inconsistent (Ingersoll, 2001; Ingersoll & Kralik, 2004; Smith & Ingersoll, 2004; Wong, 2004). Effective programs must have key supports that include providing seminars for beginning teachers, mentors in the same field, common planning time with experienced teachers, and administrative support (Gujarati, 2012; Wong, 2004). Yet researchers have discovered that the number of teachers receiving these key supports is minimal; too often novices receive an indifferent mentor, administrators are too busy to provide constructive feedback, and professional development does not apply to teachers’ needs (Ingersoll, 2001; Smith & Ingersoll, 2004).
Further, novices tend to receive only one year of induction support even though mastery of any occupation may take years of practice (Davis & Higdon, 2008; Ingersoll & Kralik, 2004; Smith & Ingersoll, 2004; Wong, 2004). One year of teaching and induction, no matter how effective, may not be enough for many teachers to build self-efficacy and feel as if they are competent in classroom management, lesson planning, and assisting struggling learners. It is normal for educators to experience setbacks that decrease self-efficacy, but most schools do not address how to increase teachers’ confidence in their abilities after their first year (Ingersoll & Kralik, 2004; Smith & Ingersoll, 2004; Strong, 2009; Wilkinson, 2009).

In short, induction programs are meant to positively influence novice teachers’ self-efficacy and instructional practice, but design and implementation are crucial to their success. Schools must consider which supports are offered, when they are offered, and which key stakeholders should be involved in the process. The number of years the induction program lasts may also matter given that self-efficacy and instructional competency may take years to develop.

Problem of Practice

This qualitative evaluation case study took place in the Robbinsville School District, a PreK-12 district in central New Jersey that has three schools, 3,200 students, and approximately 300 classroom teachers. Robbinsville is an “I” district, (as labeled by the New Jersey Department of Education’s “district factor grouping”), which means it is in New Jersey’s second wealthiest group of schools. It is also a high achieving district and is known for producing many students and athletes who successfully compete at a high level despite its relatively small size (McKenna, 2015).

Being a small district, Robbinsville tends not to hire as many teachers as many larger districts do, but is currently experiencing a wave of retirements. I currently serve as the Acting
Assistant Superintendent of Curriculum and Instruction. Over the past three school years, we have hired approximately twenty-five teachers each year due to retirements, maternity leaves, and general teacher attrition. These teachers are true novices; they are both new to the profession as well as the district. Though our actual attrition rate due to novice teacher departures is currently below 5%, the central office administration wants to ensure that our induction program is orienting staff into the district culture, helping teachers enhance their instructional practice, and increasing their self-efficacy so that we can develop and retain this influx of beginning teachers.

While various studies have focused on how induction increases teacher efficacy and retention, most neglect to analyze the benefits of multi-year induction programs, probably because these programs are so rare (Davis & Higdon, 2008). Since most studies focus on one-year programs for first year teachers, it is difficult to know if multi-year initiatives are more likely to improve teacher self-efficacy and classroom instruction.

The Robbinsville New Teacher Induction program lasts for four years and assists teachers during the tenure process; teachers who have demonstrated their merit receive tenure after four years and one day of teaching. In Robbinsville, we believe teachers are “tenurable” if they have developed survival skills, are competent in the basic skills of instruction, and have begun to expand their instructional flexibility to meet diverse students’ needs, acquire instructional expertise, and contribute to the growth of their colleagues’ instructional expertise (Fuller & Brown, 1975; Leithwood, 1990).

The program aims to successfully induct teachers into the profession and retain these high-quality, tenurable teachers. To do so, it focuses upon building teachers’ self-efficacy over time with reflective exercises and support from both mentors and their cohort colleagues.
Further, the program introduces novices to a variety of research-based instructional strategies so that they can better meet their students’ needs and eventually encourages novices to contribute to the greater Robbinsville community. Essentially, the program aims to help novices transition from inward-looking teachers who need assistance with their instruction to outward-looking, competent educators with a diverse repertoire who have the ability to lead their peers (Conway & Clark, 2003; Fuller & Brown, 1975; Leithwood, 1990).

During novices’ first year of teaching, the district offers a three-day summer orientation, arranges mentors for each novice teacher, and provides five professional development seminars where novice teachers and mentors discuss problems of practice and instructional strategies. In year two, Robbinsville provides five additional professional development sessions. They focus on more complex instructional strategies such as Socratic Seminars and student-centered questioning protocols. After each session, novice teachers are then expected to apply these approaches in their classroom. At the subsequent meeting, they collectively reflect on the implementation process for each new strategy. That way they can discuss their successes and struggles with peers and collectively brainstorm ways to help improve student learning outcomes. In year three, teachers are assigned an administrator mentor and are expected to conduct a year-long action research project which is then shared with their colleagues. The administrator mentor is paired with a novice who has a similar background or area of interest, and helps the novice conduct action research in the classroom. In year four, which was new for the 2016-2017 school year, novices are required to contribute to the district by either developing a professional development session for their peers or community activity for students and parents that draws on their Year 3 action research project. Table 1 depicts an overview of the program.
Please see *Appendix A* for a more detailed listing of the activities in the New Teacher Induction Program curriculum for each year.

**TABLE 1 Overview of the Robbinsville New Teacher Induction Program**

<table>
<thead>
<tr>
<th></th>
<th>Summer Session</th>
<th>During the School Year</th>
<th>End of Year Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td>Who: All first year teachers</td>
<td>Who: All first year teachers as well as their assigned mentors</td>
<td>Who: All first year teachers and their assigned mentors</td>
</tr>
<tr>
<td></td>
<td>When: Three full days in August</td>
<td>When: Four one-hour after-school meetings throughout the school year (September, November, January, and March)</td>
<td>When: One one-hour after-school meeting in May</td>
</tr>
<tr>
<td></td>
<td>What: Novices attend summer orientation to learn about computer and email logins, gradebooks, Robbinsville culture, the evaluation system, mentorships, etc.</td>
<td>What: Sessions focus upon <strong>basic strategies</strong> such as setting instructional goals/objectives, Differentiated Instruction, and establishing classroom culture</td>
<td>What: Novices and their mentors reflect on school year and set professional goals for the following year</td>
</tr>
</tbody>
</table>

It should be noted that teachers also participate in coaching cycles with our instructional technology, humanities, math, and science coaches throughout the year (depending on their given subject area). During each cycle, which takes place over 3-4 months, novices observe the coach, the coach then observes and co-teaches with the novice (and provides feedback afterwards), then the coach revisits the novice’s classroom to see how the
feedback was implemented (and if warranted, suggest further recommendations). Novices debrief with the coach after each “round” of coaching so that they can better process the feedback and develop an implementation plan.

| Year 2 | Who: All second year teachers  
When: Four one-hour after-school meetings throughout the school year (September, November, January, and March)  
What: Sessions focus upon student centered instructional models such as questioning protocols, Socratic Seminars, World Cafe’ Discussion techniques, and Instructional Technology | Who: All second year teachers  
When: One one-hour after-school meeting in June  
What: Novices reflect upon school year and set professional goals for the following year |
|---|---|---|
| Year 3 | Who: All third year teachers and an assigned administrator mentor  
When: Two one hour after-school meetings in October and January  
What: Sessions focus upon action research; in October novices choose an action research topic and begin designing and implementing a study; the January session serves as a whole group check-in; novices and administrator mentors meet | Who: All third year teachers  
When: One-hour after-school meeting in June  
What: Third year teachers present their action research findings to fellow Year 3 teachers, administrators, and Year 2 teachers |
While the general logic of “more is better” would suggest that a four-year, new teacher induction program would yield superior results to a one-year program, few neighboring districts offer this kind of support and it was not clear what impact these orientation meetings, mentor assignments, and professional development sessions were having on our novices’ self-efficacy and instructional practice from year to year. The district could benefit from discovering how components of the program might be helping our novices’ develop self-efficacy and improve their instructional practice, which studies have shown help increase teacher effectiveness and retention (Leithwood & Jantzi, 2008; Skaalvik & Skaalvik, 2010; Tschannen-Moran & Woolfolk Hoy, 2006). As a result of my experience overseeing the New Teacher Induction program for the past two years, I have observed novice teachers’ instruction improve over the course of the program and/or have witnessed their self-efficacy rise, but Robbinsville lacks data about these developments from the teachers’ perspectives. Knowing how the teachers perceive the program
and its influence upon their self-efficacy and instructional practice will provide the basis for reviewing the program’s curriculum so that ultimately the program does meet novices’ needs.

Further, the implications of an evaluation of the New Teacher Induction program may lead to understanding more about which activities successfully ameliorate teachers’ feelings of doubt and isolation. Since Robbinsville is a smaller district, we do not have many extrinsic motivators such as higher rates of compensation, additional vacation days, or fewer teaching periods to retain effective teachers. Therefore, it was important to evaluate our New Teacher Induction program to see if it was helping novices develop a sense of self-efficacy and improving their instruction, especially since we are committing human and material resources to an induction program that lasts for four years rather than one. The findings of this study will help Robbinsville School District review and refine its induction program so that we can ensure the program is helping retain effective educators and not wasting valuable resources.

Statement of Purpose

The purpose of this qualitative evaluation case study was to consult Robbinsville’s second, third, and fourth-year teachers to explore their perceptions of how their self-efficacy and instructional practices have changed over their early years of teaching and how they feel the multi-year induction program influenced those changes. This exploration included three separate in-depth focus groups of Year 2 teachers, Year 3 teachers, and Year 4 teachers during the fall of 2016. The focus groups were broken into three cohorts so that I could analyze how each year of the program might influence self-efficacy and instruction; each cohort reflected upon the previous year’s professional development.

After the focus groups, I created a Google Forms qualitative survey to send to all Year 2, Year 3, and Year 4 teachers in the district (n = 50) so that I could confirm themes generated from
the focus group interviews and determine if what teachers shared in front of their peers aligned with what they discussed in an anonymous survey. To garner “real time” data, I also reviewed the New Teacher Induction program’s existing professional development evaluation forms that teachers completed anonymously during their Fall, 2016 induction meetings. Finally, I conducted one-legged interviews, which typically allow the interviewer to informally ask teachers “How’s it going?” about a new educational initiative, practice, or professional development experience (Hall & Hord, 2001). They are called “one-legged” since they are meant to be quick; they should last for as long as you can stand on one leg. I utilized the one-legged interviews as a member check and to help me make sense of the data.

**Research Question**

The research question for the study was: From a novice teacher’s perspective, in what ways does the multi-year induction program in the Robbinsville School District contribute each year to changes in his/her self-efficacy and instructional practice?

**Theoretical Framework**

Because of a focus upon self-efficacy, the theoretical framework for this study is grounded in social cognitive theory. Social cognitive theory stipulates that the environment provides models for behavior and that environment and people influence each other through behavior. Theorists use the term “reciprocal determinism” to describe this relationship where personal factors, behaviors, and the environment equally interact and influence each other (Hoy & Burke-Spero, 2005). Consequently, humans learn by observing others’ behaviors in a social environment, internalizing what they observe others’ doing, and imitating those behaviors (Bandura, 1997). A new teacher induction program embodies social cognitive theory because it provides a non-evaluative social environment where novices learn instructional techniques,
observe and collaborate with master teachers, and attempt implementation of new skills and knowledge.

Social cognitive theory also contends that any type of learning must include reinforcement of correct behaviors, opportunities for learners to observe the actions of others, and incremental changes to learners’ behaviors so that confidence is built over time. Social cognitive theorists assert that these opportunities activate learners’ self-efficacy (Bandura, 1997). As stated previously, self-efficacy is defined as the way in which one views his/her ability to succeed in a given situation or environment (Tschannen-Moran & Woolfolk Hoy, 2006). Self-efficacy is grounded in social cognitive theory because it emphasizes human agency, or the belief that humans have some influence over their actions. This perception of ability works alongside environmental factors and observing the behavior of others to impact learning. Self-efficacy, the environment, and learner behaviors reciprocally influence one another. Therefore, if novice teachers feel ineffective, their instruction and school environment will be negatively impacted. Similarly, if novices teach in a negative school environment or perform poorly, their self-efficacy dwindles (Skaalvik & Skaalvik, 2010; Tschannen-Moran & Woolfolk Hoy, 2006).

Self-efficacy is important because research has shown it can predict teachers’ inclinations towards innovation, penchant for special education and discipline referrals, implementation of teaching strategies, and finally, commitment to remain in the profession (Skaalvik & Skaalvik, 2010). Despite its great impact upon teaching and learning, self-efficacy is not an actual measurement of competence. Rather, it is a future-oriented perception of capability (Woolfolk Hoy & Burke-Spero, 2005). Even though a perception, self-efficacy can have a powerful impact on competence; if a competent teacher struggles with low self-efficacy, his or her self-doubt
might negatively impact professional goals, persistence, and resilience (Tschannen-Moran & Woolfolk Hoy, 2006).

Social cognitive theorists have defined four sources of self-efficacy: mastery experiences, verbal persuasion, vicarious experiences, and psychological and emotional arousal (Tschannen-Moran & Woolfolk Hoy, 2006). Mastery experiences include actual teaching accomplishments regarding student achievement or learning. If teachers encounter success, they are more likely to believe they will be competent in the future. Verbal persuasion is influenced by the verbal feedback a teacher receives about her instruction from parents, colleagues, and/or administrators. Those who receive consistent positive and/or constructive feedback are more likely to feel efficacious (Woolfolk Hoy & Burke-Spero, 2005). Vicarious experiences involve the impact of teachers viewing models of instructional techniques or strategies. If teachers identify with the modeler, then self-efficacy increases (Tschannen-Moran & Woolfolk Hoy, 2006).

Finally, psychological and emotional arousal are shaped by the emotions that occur as a result of implementing a lesson. If teachers believe they successfully delivered instruction, then those positive emotions will help them associate teaching with a positive state of mind and ultimately be more receptive to additional teaching experiences. If teachers believe they were unsuccessful in delivering instruction, their emotional and psychological states will be negatively impacted and teachers might be less willing to improve their practice. Further, if teachers are too overwhelmed or stressed, they are not psychologically or emotionally ready to receive feedback about their practice (Tschannen-Moran & Woolfolk Hoy, 2006).

In short, relying on social cognitive theory and beliefs about self-efficacy, the multi-year induction program is based upon the following assumptions:
1) A multi-year induction program that offers teachers four years of structured professional development creates a supportive environment with *mastery experiences*. Novices are able to meet and co-plan with supervisors and colleagues, have time to discover and implement innovative instructional strategies successfully, and receive feedback on their instruction in a non-evaluative environment.

2) Humans benefit from observational or *vicarious learning*; they watch the actions of others and find role models for their targeted behavior (Glanz, Rimer, & Lewis, 2002). During New Teacher Induction professional development sessions, novices will have opportunities to observe administrators and master teachers employ effective instructional strategies and will have opportunities to adjust their instruction accordingly.

3) Reinforcement or *verbal persuasion* from colleagues, administrators, and induction program supervisors will help promote effective instructional practices while limiting the use of ineffective ones. Novices will receive various means of feedback to modify their behavior and reflect upon their instruction.

4) A multi-year induction program encourages learning in small increments; teachers have time to develop self-efficacy and develop positive *emotional and psychological arousal*. No one is expected to become a master teacher in the course of ten months; teachers have time to reflect upon and improve their instruction without being overwhelmed by unrealistic expectations.

These assumptions can be seen in the logic model below:

FIGURE 1 New Teacher Induction Logic Model
Figure 1. New Teacher Induction Logic Model; Adapted from Fitzpatrick, Sanders, & Worthen (2011).

- Input: Approximately 70 Year 1, 2, 3, and 4 teachers participate in a district mandated multi-year induction program.

- Implementation: Teachers attend ongoing professional development throughout their first through fourth year of teaching to gain support from administrators and colleagues in instruction, classroom environment, action research, and ways to contribute to the profession to further develop instructional expertise and self-efficacy.

- Process: Novice teachers attend five professional development trainings and three days of orientation during Year 1, five sessions during Year 2, and three sessions during both Year 3 and Year 4.

- Outcomes: Over the course of four years, an increase in self-efficacy and improvement of instructional practice for novice teachers.

- Impact: With increased self-efficacy and instructional competence, teachers are more likely to experience excellent student outcomes and satisfaction with their role as a Robbinsville educator.
Chapter II

Literature Review

As induction has been conceptualized in differing ways, the research base tends to vary in terms of focus. Many studies attempt to link induction programs to teacher retention. Others illuminate the novice teacher experience and how teachers might lack collegial support or self-efficacy. Finally, some researchers emphasize a particular component of induction such as mentoring or professional development workshops and its influence upon instructional practice. Essentially, the literature base around induction programs is a three-legged stool; the majority of studies illustrate how induction programs impact teacher retention, self-efficacy, and/or instructional practice. It is important to note that though the empirical research base mainly concerns induction as the means to boost teacher retention, studies also indicate that teachers are less likely to remain in the profession if they struggle with self-efficacy and/or delivering instruction (Fry, 2010; Lortie, 1975; Skaalvik & Skaalvik, 2010; Tschannen-Moran & Woolfolk Hoy, 2006; Woolfolk Hoy & Burke-Spero, 2005). It was important to review studies via the concept of this three-legged stool to develop a thorough understanding of what is known about novice teachers and induction programs.

As the studies were reviewed, three major themes emerged. The first theme concerns factors that influence early teacher development, specifically teacher self-efficacy. Since my theoretical framework relies upon self-efficacy theory, I wanted to include what the literature says about the impact of self-efficacy upon teacher development, instruction, and retention. The second theme analyzes what is known about induction programs. These studies evaluate components of induction like mentoring and professional development to determine which supports help teachers feel more confident and effective. Finally, the last theme involves multi-
year induction programs, with researchers exploring how teachers who receive more than one year of induction support might have advantages over their peers. These themes encompass the challenges novice teachers face, the importance of teacher self-efficacy, what effective induction programs look like, and the role induction programs have in increasing retention and creating efficacious, high quality educators. The themes relate to the study’s research purposes since they explore how Robbinsville can evaluate its current induction process and improve a comprehensive program that helps increase teacher self-efficacy and improve instruction over multiple years.

Early Teacher Development and the Importance of Self-Efficacy

Early teacher development. As mentioned previously, my theoretical framework relies on self-efficacy theory, but it is also important to discuss models of early teacher development and how self-efficacy might influence various stages of said development. Perhaps the most famous model of teacher development is Fuller’s (1969) Stages of Concern, with “concerns” being defined as novices’ perceived problems as they transition into the role of teacher. Fuller was able to create this three-stage model after interviewing 50 student teachers and reviewing databases of similar surveys about novices’ experiences and concerns about teaching. Six years later, Fuller worked with Brown to add a fourth stage. In these four stages, Fuller and Brown (1975) examine the transition from pre-teaching to a well-adjusted novice running his/her own classroom and how concerns shift during each stage of development.

It should be noted that in many teacher development models, the first five to ten years of teaching are combined together without any differentiation in how teachers develop each year. Fuller and Brown (1975) are unique in that they focus upon stages of development rather than years of experience; teachers might experience these stages at different times in their early
career. As Watzke (2003) emphasizes, “Stage theories focus on distinct points in development that are not related to a particular age. These developmental points are evident in the teachers’ ways of thinking” (p. 210). In fact, though there are different theories and numbers of stages in studies of teacher development, research has shown that these theories follow the same progression—in the first stage(s) of teaching, novices lack confidence and are unsure of classroom management, in the middle stage(s) they are more concerned about their improving their instruction; in the last stage(s) they are most concerned with student learning (Conway & Clark, 2003; Kagan, 1992; Watzke, 2003).

In Fuller and Brown’s (1975) model, the first stage is “preteaching.” This is when novice student teachers are more likely to identify with their students than their cooperating teachers and cannot fully grasp an educator’s various roles and responsibilities. Consequently, their concerns about teaching are ambiguous and hard to identify. Once novices officially become teachers, they enter the second stage, called the “survival” stage. In this stage, novices are concerned about classroom management and acquiring content knowledge. They might also be worried about being evaluated by their building administrators and/or supervisors. They are anxious about their own role in the classroom and wonder if they are competent enough to deliver instruction. These teachers are more concerned with their own role in the classroom than their students’ learning.

In the third “task” stage, teachers begin to feel like they are in control of the classroom and become more attentive to their teaching performance, specifically how to overcome any obstacles such as limited materials or large class sizes. They are most focused upon the science of teaching rather than altering instruction to improve student learning. Finally, in the fourth “impact” stage, teachers are no longer focused upon their own performance and are most concerned with adapting curriculum and instruction to meet their students’ diverse needs (Fuller
As Conway and Clark (2003) articulate, these teachers have journeyed from thinking inward about their own performance to thinking outward about students’ learning and believe that they can successfully respond to their students’ needs.

Fuller and Brown’s (1975) model was initially considered linear and hierarchical, meaning that teachers would not be able to reach a stage without completing the previous one, but additional research has shown that stages can occur simultaneously or overlap (Adams, 1982; Conway & Clark, 2003; Kagan, 1992; Watzke, 2003). Essentially, the journey of teacher development is both inward and outward—as they learn, teachers continue to self-reflect and become more self-aware so that they can continue to hone their instruction and improve student learning (Conway & Clark, 2003). Further, Fuller and Brown (1975) asserted that school districts should attempt to limit teachers’ survival stage and inward period of focus. However, later research has shown that this effort is counterproductive since self-reflection and metacognition is a key factor in developing teachers’ confidence and instruction (Conway & Clark, 2003; Kagan, 1992).

In short, teacher development research indicates that early career teachers’ developmental concerns must be addressed so that they can ultimately meet students’ needs. Though Fuller and Brown’s (1975) Stages of Concerns has proven to be not as linear as originally thought, research has shown that teachers’ needs evolve and that it takes time to develop their confidence and instruction prowess, something which school districts should consider as they design their induction programs (Adams, 1982; Conway & Clark, 2003; Kagan, 1992; Watzke, 2003).

The importance of self-efficacy in early teacher development. The importance of developing novice self-efficacy, especially in regards to early teacher development, materialized as a common theme in the teacher induction literature. Specifically for educators, self-efficacy
means they believe they have the tools they need to be master teachers. Research has shown that positive efficacy beliefs lead to enhanced performance, improved attendance, and increased student achievement (Bandura, 1997; Leithwood & Jantzi, 2008). As mentioned previously, novice teachers tend to enter the profession with high aspirations yet quickly become overwhelmed by their inability to manage its many demands. As a result, many novices report that they lack self-efficacy (Billingsley et al., 2004; Fry, 2010; Ingersoll & Smith, 2004; Lortie, 1975; Smith & Ingersoll, 2004). Low self-efficacy, or the belief that one may not be able to succeed in a given situation, is the most common cause of novice attrition, even more so than school culture, lack of salary, and difficult teaching assignments (Cherubini, 2009; Cherubini et al., 2011).

Employees in any field should feel they have the skills and tools they need to succeed. Otherwise, those who feel ineffective might become frustrated and find employment elsewhere. Therefore, teachers who report feeling more efficacious are more likely to be effective teachers and remain in education (Cherubini, 2009; Fry, 2010; Leithwood & Jantzi, 2008). Since they work alone and receive limited feedback regarding their daily practice, teachers commonly report feeling unsure about their efficacy in improving student learning. Lortie (1975) states, this “uncertainty...can be transformed into anxiety and painful self-doubt, which reduce the psychic rewards of classroom teaching” (p. 161). Fuller and Brown (1975) also indicated that in the “survival” stage of teacher development, novices are solely concerned with their performance and fear evaluation. If novices do not receive enough constructive feedback and administrative support, their self-efficacy can dwindle (Cherubini, 2009; Cherubini et al., 2011; Fry, 2010; Tschannen-Moran & Woolfolk Hoy, 2006).
Several researchers have investigated the relationship between self-efficacy and novice teacher attrition. Tschannen-Moran and Woolfolk Hoy (2006) explored how novice teachers’ self-efficacy might differ from veteran teachers’. In this mixed-methods study, teachers from a Midwestern graduate school program as well as two local elementary schools, a middle school, and a high school, completed an anonymous survey that included questions from the Teachers’ Sense of Efficacy Scale (TSES), a measure that analyzes how classroom management, instructional strategies, and student engagement impact efficacy. Survey items also included questions about how long the educators had been teaching, their school settings, and the amount of verbal support they had received in the past school year. Two hundred twenty-five teachers voluntarily responded; 74 participants were novices with less than three years of experience, 181 participants were veterans with four or more years of experience.

After completing a multiple regression analysis of the data, the researchers found that the novices’ self-efficacy beliefs were lower than the veteran educators, even when controlling for personal demographics and school setting. Veteran educators also reported more verbal support from administrators, as well as greater satisfaction with their instruction. The authors hypothesized that teachers who struggle in their early years might need to rely upon their colleagues and administrators for support, therefore novices have a stronger need for verbal persuasion. Verbal persuasion/support might be less important to career teachers since they have already accumulated mastery experiences that proved their competence. Due to their limited teaching experience, novices have less opportunity to demonstrate their capability and might need more administrative and collegial support to boost their self-efficacy. Though novices receive administrative feedback during the observation process, these periodic reviews may not provide enough guidance and support to increase self-efficacy.
The findings of this study would suggest that novices require more consistent and ongoing encouragement, but actually receive less verbal persuasion and support than their veteran peers. In addition, “a scatter plot of the Teacher Sense of Self-Efficacy Scale (TSES) and years of experience showed a jump in the lowest self-efficacy scores after three years, indicating that after three years most teachers had either strengthened their self-efficacy beliefs or had left the field” (Tschan nen-Moran & Woolfolk Hoy, 2006, p. 949). This study suggests that teachers who remain in the profession eventually experience increases in self-efficacy, however, novices still require more formal feedback and encouragement from their veteran colleagues and administrators so that they can develop a greater sense of self-efficacy in the formative years of their career and the field can retain more teachers.

Like Tschannen-Moran and Woolfolk Hoy (2006), Woolfolk Hoy and Burke-Spero (2005) were also interested in measuring novice teachers’ self-efficacy. Their longitudinal study followed 53 Midwestern teachers through their Master’s of Education program and into their first year of teaching. Participants completed four measurement tools about their self-efficacy as well as a survey about themselves and their school setting. Three of the four scales had a similar pattern; “...efficacy, however assessed, rose during teaching preparation and student teaching, but fell with actual experience as a teacher” (p. 352).

The study authors hypothesized that self-efficacy scores rose during student teaching because participants experienced a year-long supportive immersion program and gradually took over responsibility in the classroom. When this support stopped, efficacy fell. As the novices assumed responsibility for their own classrooms, many became disappointed with not being able to reach the goals or standards they set for themselves. As the authors asserted, “prospective and novice teachers often underestimate the complexity of the teaching task and their ability to
manage many agendas simultaneously” (Woolfolk Hoy & Burke-Spero, 2005, p. 353). These teachers had relied on the support provided by the Master’s program but once they no longer shared responsibility with a veteran colleague, they struggled to handle the various responsibilities that came with the profession.

Similar to Tschannen-Moran and Woolfolk Hoy (2006), Woolfolk Hoy and Burke-Spero (2005) also noted the importance of verbal persuasion from colleagues and administrators. The study revealed that teachers who believed that they were supported by administration also reported higher self-efficacy in the classroom. The authors did not define “administrative support” or discuss how to increase novices’ self-efficacy. Regardless, this study illuminates the need for a better transition between pre-service and in-service teaching and for further investigation of how administrators can provide supports including verbal persuasion to increase novice teacher self-efficacy.

Curious about how self-efficacy might influence teacher attrition, Perrachione, Rosser, and Petersen (2008) conducted a mixed-methods study of over 200 public school teachers. In order to determine which factors increased retention, their survey questioned participants about intrinsic motivators such as personal teaching efficacy, working with students, and job satisfaction. After completing a multiple-linear regression of the data as well as qualitative analysis, they found that educators were significantly more likely to remain in teaching if they felt they positively impacted student learning, felt efficacious, had opportunities to collaborate with others, and received recognition. As one respondent stated, “I know I am making a positive difference in my students’ lives. I see improvement every day in my students. This is the reason I went into teaching and why I will stay in teaching” (Perrachione, Rosser, & Peterson, 2008, p. 7).
While this teacher did not use the phrase “self-efficacy,” she is referring to emotional and psychological arousal. She noticed that her instruction helped students learn and her confidence level rose. Because she was confident in her instructional practice and her future success, she expressed satisfaction with her job and intent to remain in the profession. In this case, the teacher’s self-efficacy and perception of her ability to effectively deliver instruction led to her wanting to remain in the profession. The research on this topic provides evidence of the critical role that self-efficacy plays in novice teacher development and retention, and suggests that programs targeted to novice teachers should focus on assisting them in developing their self-efficacy.

**Critical Features of Effective Induction Programs**

Since researchers know that novices tend to struggle with self-efficacy and that induction programs can help increase teachers’ confidence and improve their practice, it is important to unpack the research base on induction programs and determine which specific interventions (or combination of said interventions) are most effective in developing efficacious, competent teachers. For this reason, the ensuing sections discuss research about the effectiveness of key components of induction programs including mentoring, administrative support, and professional development and how these components might influence the three-legged stool of teacher self-efficacy, instructional practice, and retention.

One issue facing induction programs is that there is no clear definition for “induction” (Kearney, 2015; Wong, 2004). “Induction” is used interchangeably with “mentoring,” “orientation,” and “professional socialization” and policymakers debate about what induction programs should entail. Consequently, schools selectively choose which elements to focus upon
Instead of offering a more comprehensive or standardized support system (Ingersoll, 2012; Kearney, 2015).

Since states lack a clear definition of induction, there are glaring inconsistencies in program design and implementation across contexts. As of 2012, only 27 states required some form of induction and/or mentoring for beginning teachers and only six states required induction for more than two years (Potemski & Matlach, 2014). These 27 states vary in how induction is defined, which components are mandated, how mentors are trained, and how novice growth is assessed. Unfortunately, “...the rhetoric of the importance of induction programs does not match the reality of what is happening in schools” (Kearney, 2015, p. 5). Besides generating a common definition and program standards for induction, states have yet to set time requirements for induction and mentoring, or prescribe how many professional development sessions and how much release time each novice teacher should receive.

Regardless, over the past two decades the percentage of novices who report they have participated in an induction program has increased from about 50% in 1990 to 91% in 2008 (Ingersoll, 2012). When reviewing national survey data of over 3,000 novice teachers, Ingersoll (2012) found that the most common induction activity (87% of beginning teachers) was having regular communication with an administrator. Eighty percent of his sample had a mentor teacher, a little more than 50% had common planning time with other teachers in the same subject area, and less than 20% received a reduced teaching load. The subsequent studies focus on different induction components, specifically mentoring, collaboration with administrators and colleagues, and professional development, as well as how these supports might increase teacher self-efficacy improve instruction, and decrease attrition.
Mentoring and induction. Over the past twenty years, mentoring, when novice teachers are assigned a veteran teacher to help support them through their first year, has been the main component of most teacher induction programs. Mentoring is considered a, “nurturing process in which a skilled or more experienced person teaches, sponsors, encourages, and counsels a less skilled or less experienced person for the purpose of promoting the latter’s professional and/or personal development” (Anderson & Shannon, 1988, p. 40). Ideally, mentors establish caring relationships with their protégés, model sound instructional practices, and provide pedagogical coaching to increase their mentees’ capacity and self-efficacy. Novices tend to consider mentorship the most vital part of the induction process, hence the relatively large number of existing studies about how mentors influence teachers’ self-efficacy, instruction, and retention (Ingersoll & Smith, 2004; Smith & Ingersoll, 2004; Strong, 2009).

While there are hundreds of studies about mentorship, mentor program components (and their success) vary. Many are based around an apprenticeship model where an experienced teacher works closely with a novice teacher. Yet, as various researchers have discovered, this format tends to negate the knowledge of the novice, supports conformity to existing practices, and assumes the mentor is an expert (Hellsten, Prytula, Ebanks, & Lai, 2009; Shanks & Robson, 2012; Wood & Stanulis, 2009). Furthermore, while mentoring is quite pervasive, the content, format, and quality of these programs varies across the country, a given state, and possibly even within a single school district (Billingsley et al., 2004; Hellsten et al., 2009; Ingersoll & Smith, 2004; Smith & Ingersoll, 2004). The duration and intensity of mentorships also vary; some mentors meet with their assigned novices once a week, others work together only during the beginning of the school year. Some programs include anyone new to a school, even if they have previously taught, while others focus on those purely new to teaching.
To combat inconsistent support of novice teachers, schools are beginning to design mentor programs that evoke educative mentoring which, “relies on developing an explicit vision of quality teaching and of teacher learning where mentors interact with novice teachers in ways that help them learn in and from their practice” (Wood & Stanulis, 2009, p. 5). In their reviews of the history of mentoring and induction programs, Wood and Stanulis (2009) and Feiman-Nemser et al. (1999) noted that in the 1990s, forward-thinking schools shifted in their approach in how they defined effective mentoring. Schools began to advocate for mentors to regularly meet with novice teachers, conduct informal observations, help mentees reflect upon their strengths and weaknesses, and co-plan/co-teach with their assigned novice. Many districts also mandated that mentors needed at least three years of experience, extensive pedagogical content knowledge, excellent communication skills, and a commitment to ongoing professional growth (Feiman-Nemser et al., 1999; Wood & Stanulis, 2009). This combination of traits allows mentors to evoke interpersonal as well as career-specific support, which includes coaching, sharing resources, and providing constructive feedback (Kram, 1985). Empirical research about mentoring, while expansive, tends to examine the mentoring of first year teachers in two major ways. Since the rise of mentoring in the early 1980s, researchers have conducted studies that compare non-mentored and mentored teachers as well as qualitatively examine why mentoring might increase teacher self-efficacy, improve instruction, and/or decrease attrition.

**Comparing mentored and non-mentored novices.** While there is an abundance of research that examines how teachers perceive their mentor experience, few studies compare teachers who were mentored to those who were not. These comparison studies are important because policymakers should not solely rely upon teacher self-reports to determine whether to fund mentoring programs. Instead, they need research that determines if mentored teachers are
more confident in their abilities, effective, and likely to remain in the profession than their non-mentored peers. The following studies (Brown & Wambach, 1987; Odell & Ferraro, 1992; Spuhler & Zetler, 1995) used experimental and control groups to evaluate existing mentor programs and determine if mentoring had a positive effect upon novice teacher self-efficacy, instruction, and/or retention.

To begin, Brown and Wambach (1987) designed and then evaluated California’s Mentor Teacher Induction Project (MTIP). The researchers had an experimental group of teachers attend a two-phase mentoring program. In the first phase, pre-service teachers were matched with master teachers for a period of seven weeks. In the second phase, the same teachers, now in their first year of service, were reconnected with their master teachers for yearlong mentorships. The mentors attended professional development sessions about effective mentoring practices and were matched with their mentees based upon content/area and grade. Mentors were also expected to conduct ongoing observations and provide constructive feedback throughout the novices’ first year.

At the conclusion of the novices’ first year, the experimental group who had completed both phases and a control group who did not participate in MTIP or have a formal mentor were given a survey about their teaching experiences. The survey included questions about their intention to stay in teaching; the experimental group was more likely to answer “yes, probably” while the control group was more likely to answer “unsure.” Other questions focused upon perceptions of mentoring; mentored teachers were more likely to respond that they felt affirmed because they had this additional support. Lamentably, the authors’ sample selection of both the experimental and control groups was unclear and they did not measure “self-efficacy” but focused upon novices feeling confident and affirmed. However, Brown and Wambach’s (1987)
decision to provide novices with a mentor teacher before they began their teaching experience is thought-provoking. If schools had the resources to provide this two-phase model, mentors and novices would have more opportunities to establish relationships. These relationships with veteran colleagues can increase novices’ self-efficacy and improve their instruction (Billingsley, et al., 2004; Hellsten et al., 2009; Kram, 1985).

In another comparison group study, Spuhler and Zetler (1995) evaluated Montana’s Beginning Teacher Support Program. Efforts were made to match mentors with novices who taught at the same grade level and/or in the same content area. Yet this study did not train the mentors or provide release time for mentor-mentee collaboration; the researchers wanted to isolate effects of mentoring from other forms of new teacher induction support such as new teacher orientation and professional development. The sample size was small; only twelve teachers in the experimental group and twelve in the control group. The control group participants did not receive a formal mentor.

Researchers reviewed the two groups’ pre-and post-program surveys as well as retention data. Spuhler and Zetler (1995) found that retention rates were higher for the experimental cohorts than the control groups. In the first year of the evaluation, 92% of the mentored novices remained in the profession compared to 73% of the non-mentored teachers. In the second cohort, 100% of the mentored teachers were retained compared to 70% of the non-mentored. Mentored novices also reported more satisfaction with their jobs and confidence in their teaching ability. Administrators were also surveyed about the mentored teachers’ instructional practice; these leaders reported that eight of the twelve mentored novices developed beyond normal first year expectations and that, “development occurred in variety and appropriateness of lesson delivery, instructional strategies and teaching for an objective” (Spuhler & Zetler, 1995, p. 18). Though
Spuhler and Zetler (1995) did not share administrators’ formal ratings of non-mentored teachers’ instructional practice, the study illustrates that mentors can positively influence teacher retention and instruction.

Lastly, Odell and Ferraro (1992) with their longitudinal investigation of novices from New Mexico, also attempted to compare mentored and non-mentored teachers. In the first year, researchers tracked 160 novices’ experiences with mentoring. For the purposes of this study, “mentoring” included release time for mentor and novices to collectively plan instruction and for the mentor to observe the novices’ instruction and provide constructive feedback. The majority of teachers reported positive feelings about their relationships with their mentors. They also ranked emotional support from their mentor as the most important aspect of mentee/mentor relationship.

Four years later, Odell and Ferraro (1992) were able to locate about 88% of these teachers. Of these participants, about 96% were still teaching. The located teachers then completed surveys about why they had remained in the profession and their perceptions of their mentoring experience. Those who had remained in teaching and were satisfied with their jobs were more likely to have had a mentor who provided ongoing emotional support. The authors lacked a formal control group, but compared their mentored participants’ attrition rates to those of non-mentored teachers from New Mexico. After four years, 64% of non-mentored novices were still teaching compared to the 96% of teachers who participated in the mentoring study.

These comparison studies indicate that mentored novices are more likely to remain in teaching than their non-mentored peers. Taken together, the studies also imply that consistent, formal mentoring can help increase feelings of self-efficacy and improve instructional practice,
especially when novices and mentors are provided time to co-plan lessons and observe each other’s instruction.

**Qualitative research about mentoring.** Qualitative studies have also been conducted to tease out why mentoring relationships might increase self-efficacy, improve instructional practice, and reduce attrition. Kent, Feldman, and Hayes (2009) assigned two teacher candidates to a mentor from their school as well as a university supervisor (p. 73). Throughout the school year, the university supervisors evaluated the novices on their content and pedagogical knowledge. The university supervisor also provided workshops about different pedagogical practices.

Yet as the researchers reviewed teacher and mentor questionnaires, they found that even within the same program mentors took on different responsibilities. Some engaged with their mentees daily to discuss instructional strategies, some appeared only when needed, and principals even switched a few teachers mid-year to other non-mentorship duties. Despite these inconsistencies, the majority of the teachers rated their mentors as helpful, supportive, and effective, perhaps because they also relied on their university supervisor for support. If the novices did not also have an assigned university support system, one wonders if the teachers would have rated their school mentors favorably. Other studies suggest that this inconsistency of mentor involvement is commonly found in schools (Billingsley et al., 2004; Hellsten et al., 2009; Shanks & Robson, 2012; Smith & Ingersoll, 2004).

Results from the Kent et al. (2009) study showed that 96% of first year teachers were “rated as competent or better…” (p. 82). One limitation of the study was that school administrators did not submit formal evaluation scores. Instead, they anecdotally reported that the participants scored consistently higher than non-participating first year teachers. A common
remark was, “They truly operate as veteran teachers!” (p. 87). Administrators observed that novices were more likely to take risks and include a variety of instructional strategies. Though these results indicate that supervisors and administrators were pleased with teachers’ progress, the study neglected to include an actual comparison group.

Despite its small, non-diverse sample, the study suggests that university and school partnerships can have a positive influence on new teachers. The university was able to help the school district provide novice-specific professional development and provided novices with consistent feedback/verbal persuasion about their progress. Therefore, even if the school-provided mentor did not meet with their mentee regularly, the latter still received university-provided support.

In another qualitative study, Hellsten et al. (2009) interviewed twelve novices to discover their views of mentorship. As they conducted the interviews, the authors noticed that mentor/mentee compatibility was key, as was having an engaged mentor. If teachers did not find their assigned mentor helpful, they tended to seek out an informal one for guidance. Over the course of the interview study, the researchers noticed that those who had more than one mentor felt more confident than their peers since, “having multiple mentors may allow for more comparisons, contrasts, and higher levels of reflection...” (p. 713). Further, teachers with more than one mentor were less likely to just clone the expert teacher’s practices and more likely to participate as an equal member in the professional learning community. For the first year teachers, having a mentor, or in this case, mentors, was beneficial. Unfortunately, most school districts do not have the resources to assign each novice more than one formal mentor. However, when designing induction programs, it is important to consider how to provide novices with multiple perspectives and additional forms of verbal persuasion, whether from instructional
coaches, administrators, or possibly other veteran colleagues during professional development trainings.

Overall, mentorship appears to help support novice teachers; Smith and Ingersoll (2004) found, by conducting multiple regressions of national attrition data, that having a mentor in one’s field as opposed to having a mentor in another field or having no mentor at all, reduces a teacher’s risk of leaving by about 30% (p. 702). Yet it should also be noted that mentor programs have varying levels of success based on mentor-novice compatibility, mentor engagement, and program design. Though the reviewed studies indicate that mentors are more beneficial than not in welcoming, developing, and helping to retain novice teachers (Billingsley et al., 2004; Hellsten et al., 2009; Kent et al., 2009; Smith & Ingersoll, 2004), more large-scale mixed-methods research with observational data is needed to determine why mentoring might help novice teachers and which aspects of mentoring are key to its success.

Though each study had limitations, this review of the current research base is still helpful for new teacher induction program designers like me. Research indicates that mentoring is important, but a focus upon educative mentoring, where mentors are clear in their vision of what constitutes quality teaching, collaboratively plan with their mentee, encourage reflection, and provide feedback whenever possible, can help increase self-efficacy, enhance instruction, and decrease attrition (Billingsley et al., 2004; Hellsten et al., 2009; Kent et al., 2009; Smith & Ingersoll, 2004; Wood & Stanulis, 2009). It is also important to note that novices do not just benefit from meeting and co-planning with their mentor, but also administrators, university supervisors, and other colleagues since they have more opportunities to receive feedback about their instruction (Hellsten et al., 2009; Kent et al., 2009).
Administrators and induction. Building administrators are also instrumental in how novices are welcomed into the profession. Accordingly, researchers have explored how school leaders might impact teacher self-efficacy, instructional practice, and retention. As Wood and Stanulis (2009) argue, “Although most teachers cite their mentors as the most important person in their entry into teaching, many novices cite having a supportive principal as the most critical factor in their professional development” (p. 11). In a study of a large urban school district, Wood (2005) discovered that principals took on five central roles in regards to novice teacher induction: teacher recruiter, instructional leader, school culture builder, mentor program facilitator, and novice teacher advocate. If novices believe their school leaders hire strong candidates, establish a warm, welcoming climate, promote mentoring, are experts in curriculum and instruction, and support professional growth, they are more likely to feel efficacious and remain at their schools (Wood, 2005; Wood & Stanulis, 2009).

Kapadia, Coca, and Easton (2007), using survey results from over a thousand first year teachers in Chicago, found that supportive administrators had the biggest impact on how teachers perceived their job and likeliness to remain in the profession, even more so than having a mentor. Through multiple regression analysis, researchers discovered that the school administrator was seen as the person responsible for finding effective mentors, clarifying expectations, offering feedback on instruction, providing guidance on discipline issues, and planning novice teacher professional development. If teachers believed that their administrators adequately handled each of these areas, they were more likely to feel efficacious, welcomed in their school community, and committed to the profession. It should be noted that these findings are based upon teacher intentions rather than actual attrition data.
In their longitudinal research about school culture, Kardos et al. (2001) also concluded that, “Principals regularly emerged as central figures...in some cases meeting, even exceeding, the novices’ expectations for guidance and support; in others disappointing them day to day; or in the extreme, diminishing their hopes about a career in teaching” (p. 278). Effective leadership does not just entail hiring strong candidates, but also developing novices and including them in the school culture. How the administrators established a positive school culture was key; the 50 interviewed novices recommended that principals focus on enhancing teachers’ professional growth, avoiding top-down management and only talking to them when something was wrong, building relationships with novices, and encouraging veteran staff members to welcome novices into the school community (Kardos et al., 2001).

In short, administrators are responsible for scheduling common planning time, building a collaborative school culture, offering professional development opportunities, and providing constructive feedback. Taken together, Kapadia et al. (2007), Kardos et al. (2008), and Wood (2005) indicate that administrators can influence a novice’s instructional practice and decision to remain in teaching. To do so, administrators should take an active role in designing and implementing high quality induction programs.

The importance of collegial support. The research base also revealed that fellow teachers (who are not formal mentors) can significantly influence novices’ instruction, self-efficacy, and intent to remain in the field. Schlichte et al. (2005) studied five Midwestern novice teachers who volunteered to be interviewed about their first year of teaching. The five case studies with analytical commentary that resulted highlight how collegial isolation can lead to job dissatisfaction and burnout. One teacher reported feeling that her colleagues and school did not really care if she succeeded and that she considered quitting on a daily basis. Another novice felt
that she lacked interaction with her colleagues even though she had a mentor, “They were friendly enough, and ‘said’ they were available if I needed anything. But I was so overwhelmed; I didn’t even know what to ask for. I wish that I had a closer relationship with my colleagues. That would have been helpful” (Schlichte et al., 2005, p. 38). A third novice agreed by saying, “I didn’t have the support I needed. It was almost like I was overlooked. As a person, I feel like I am not important. I am not needed” (Schlichte et al., 2005, p. 38).

Only one of the five novices believed he received adequate collegial support to facilitate his understanding of curricula and ability to find needed resources. This assistance helped the novice maintain a positive outlook and feel comfortable seeking advice and resources from fellow teachers. He noted that his colleagues were responsible for helping him improve his instruction and confidence level. The other novices lacked such support, one teacher had a classroom of 55 students, one only met with her mentor three times throughout the year, while others reported that their, “busy co-workers smiled but remained distant” (Schlichte et al., 2005, p. 38). While Schlichte et al.’s (2005) study only has five participants; it illuminates the feelings of isolation that many novices experience (Fry, 2010; Jones et al., 2013; Lortie, 1975) if they lack collegial support.

Schlichte et al.’s (2005) findings were echoed in a study by Kardos and Johnson (2007). In a qualitative interview study of 50 Massachusetts novice teachers from a variety of backgrounds and school districts, the researchers discovered that very few novices had had discussions with colleagues about curriculum, instruction, and classroom management techniques. Similar to the previously mentioned studies, one teacher shared, “Here it’s pretty much, ‘There’s your classroom. Here’s your book. Good luck’” (p. 13). After interviewing teachers over the course of four years, Kardos and Johnson (2007) noticed that, “What new
teachers want for their induction is experienced colleagues who will take their daily dilemmas seriously, watch them teach and provide feedback, help them develop instructional strategies, model skilled teaching, and share insights about students’ work and lives” (p. 13). Regrettably, only about a third of the participants reported this kind of collegial support. Although mentoring has been shown to play a key role in the support of novice teachers, these two studies suggest that many novices lack access to their veteran peers’ expertise. Kardos and Johnson (2007) and Schlichte et al. (2005) have small sample sizes and their findings might be limited to their context, but they illustrate a need for novices and their more experienced colleagues to interact and collaborate.

In another small study (n=10) that included staff surveys and administrator interviews, Davis and Higdon (2008) reported that induction programs that included collaborative planning sessions with veteran colleagues not only reduced teachers’ intention to leave by 43%, but also increased reflection about instructional practice. The sessions included reviews of authentic case studies as well as online blogs for practitioners to share insights about and reflect upon their instruction. The teachers who participated in professional development with their veteran colleagues reported that these opportunities allowed them to reflect upon their instructional practice and level of self-efficacy. Because of these reflective opportunities, the teachers were more likely to adjust and improve their practice after the program. Therefore, it is not surprising that they felt more efficacious and competent. Further, this study was not solely based upon teacher perception of self-efficacy; administrators were also interviewed to determine how they believed this professional development affected teacher practice. Administrators reported that the induction program’s emphasis upon reflection and collaborative planning improved teachers’ lesson design and instruction.
Two qualitative case studies using grounded theory (Cherubini, 2009; Cherubini et al., 2011) also examined how induction programs’ use of veteran teachers can influence self-efficacy and instructional practice. Cherubini et al. (2011) hypothesized that if novices worked collaboratively with more experienced colleagues in reflective critical inquiry exercises during the induction process, their self-efficacy would increase. Researchers provided four professional development sessions for twelve novices and twelve veterans over the course of a school year. The sessions focused on real-life classroom case studies and had educators critically reflect upon what they would do in each situation; researchers hypothesized that veteran teachers would validate the novices’ instructional choices and the latter would begin to feel as if they were a part of a professional learning community. The qualitative research design included the use of reflective prompts and scripted interview questions that teachers answered in an online forum. As predicted, participants self-reported increased self-efficacy after the professional development sessions.

Cherubini (2009) also examined the effect of professional development sessions on novice teachers’ self-efficacy. Using a grounded theory approach to conduct the research, Cherubini reviewed 30 novices’ reflective journals and conducted focus group interviews, concluding that those who participated in induction programs with ongoing professional development sessions with veteran teachers were able to form professional relationships and improve their sense of self-worth (p. 192).

Before the critical reflection exercises and professional development experiences, the novices doubted their instructional effectiveness and ability to succeed as effective teachers (Cherubini, 2009). Researchers noted that when novices worked collaboratively with more experienced colleagues, the veteran teachers validated novices’ instructional choices. Novices
also began to feel more efficacious and involved in a professional learning community; their feelings of isolation and incompetence decreased as they progressed through the sessions. Overall, the novices reported that the induction program helped them feel empowered; the novices’ articulated that journaling and meeting with veterans helped increase their perceived level of self-efficacy. An additional benefit was that novices reported being more willing to seek out additional professional development since they believed that learning from others helped them become better teachers.

Also intrigued with how novices could access veterans’ expertise, Onafowora (2004) examined how one North Carolina professional development program aimed at increasing collegiality with experienced teachers could improve novice teacher self-efficacy. In this program, 25 novice teachers observed master teachers instruct struggling learners after-school. After the learners left each day, the beginning teachers met with the master educators to discuss instructional strategies, classroom management, and student engagement. The novices were then expected to take what they learned and apply it to their own classrooms. Through focus groups, self-efficacy measurement scales, and observations of the pedagogical discussions, Onafowora (2004) found that novices utilized these professional development sessions to improve their practice and that they felt more efficacious. As one novice remarked, “I’m pretty wiped out and things are going kind of rough so I’m just trying to get inspired...[I] feel not stupid but ill-equipped to do my job” (p. 39). Reports like the one novice teacher make clear why this ongoing professional development was vital to increasing teacher self-efficacy.

As the sessions went on, the teachers learned from one another, shared their doubts and concerns, and generated collective knowledge of best practices. As Onafowora (2004) asserts, “teachers need multiple opportunities to observe good practice, to talk about teaching among
themselves and with expert practitioners, to learn to observe students carefully, to experiment with strategies and techniques and assess their impact, and to make and learn from their mistakes” (p. 36). These interventions were highly effective; all 25 of the novices’ self-efficacy scores rose significantly after participating in the after-school program.

The professional development opportunities described in the studies above deliberately encouraged interactions between novice and veteran teachers to help establish collegiality and understanding about effective instructional techniques. Consequently, novices had more opportunities to learn from their peers and be reflective about their practice. This collegiality, reflection, and development of instructional practice might have caused their increases in self-efficacy and/or feelings of competence.

Though most induction programs include a formal mentor whose role is to orient a novice into the profession, many do not consider how to help novices build relationships with other teachers. When designing induction programs, research indicates that it is important to help novices build relationships with a variety of veteran educators, and to provide opportunities for these two groups to collaborate as much as possible so that novices can learn from the veterans’ expertise and feel affirmed in their own instructional choices.

**Novice-specific professional development.** When designing and implementing induction programs, school districts should also examine how to provide ongoing novice-specific professional development. Novice-specific professional development sessions are learning opportunities specifically designed to meet novices’ particular needs. For example, professional development sessions might focus upon classroom management, lesson planning, and/or establishing classroom routines, all of which tend to be particularly problematic for new teachers. Wong (2004) urges schools to have a developmental stance towards novices, viewing
them as learners rather than experienced professionals. He also advocates for professional development time for mentors and mentees to observe each other and plan as well as collaborative meetings where teachers can collectively solve problems of practice.

As Feiman-Nemser et al. (1999) advocate, “Instead of one-shot workshops and short-term training focused on generic teaching strategies, ...teachers need learning opportunities that are connected to their daily work with students, related to the teaching and learning of subject matter, organized around real problems of practice, and sustained over time by conversation and coaching” (p. 12). Novices ought to participate in professional development that allows them to collaborate with mentor teachers, observe classrooms, and reflect upon their practice by talking about teaching and learning with their colleagues (Billingsley et al., 2004; Davis & Higdon, 2008; Feiman-Nemser et al., 1999; Ingersoll & Strong, 2011; Shanks & Robson, 2012).

Davis and Higdon (2008), Cherubini (2009), Cherubini et al. (2011), and Onafowora (2004) also emphasized the importance of novice-specific professional development in helping teachers develop their self-efficacy and instructional practice. These studies examined induction programs that provided professional development sessions for teachers to collaborate and reflect with their veteran peers about instructional strategies (Davis & Higdon, 2008), analyze authentic classroom case studies involving classroom management and instruction (Cherubini et al., 2011), journal about their learning and set goals for their practice (Cherubini, 2009), and learn about classroom management, student engagement, and instructional strategies while collaboratively teaching struggling learners with veteran teachers (Onafowora, 2004). Novices who participated in these induction programs experienced ongoing professional development that was relevant, collaborative, and reflective. Researchers determined that novice-specific professional development that also encouraged collaboration and self-reflection helped teachers make sound
instructional choices. These studies also highlighted that both the educators and their evaluators reported noticeable gains in self-efficacy, and in turn, improvements in their performance (Cherubini, 2009; Cherubini et al., 2011; Davis & Higdon, 2008; Onafowora, 2004).

A summary: Key characteristics of induction programs. Researchers have consistently concluded that well-designed induction programs that include time for novices to observe and co-plan with master teachers, ongoing professional development opportunities, and administrative support help increase self-efficacy and instructional competence (Cherubini et al., 2011; Ingersoll, 2012; Smith & Ingersoll, 2004; Wong, 2004; Wood & Stanulis, 2009). These programs may help teachers shift from concerns about survival to providing instruction that improves student learning (Conway & Clark, 2003). However, there is glaring inconsistency in implementation and subsequently, in results. As mentioned previously, some districts provide multiple mentors, some none at all. Some administrators offer reduced workloads while some assign their novices to teach the most challenging classes and students. A few programs provide professional development that promotes metacognition, while others provide no time for reflection (Gujarati, 2012; Hellsten et al., 2009; Smith & Ingersoll, 2004).

Unfortunately, most induction programs do not contain all these elements, especially not over a sustained period of time. As Wood and Stanulis (2009) argue, “A quality induction program enhances teacher learning through a multi-faceted, multi-year system of planned and structured activities that support novice teachers’ developmentally-appropriate professional development in their first through third year of teaching [as teachers are building the foundation of their practice]” (p. 3). The content and duration of the induction program is important; the impact upon instruction and retention can depend upon how much support is given over a period of time (Cherubini et al., 2011; Ingersoll, 2012; Smith & Ingersoll, 2004; Wong, 2004).
Multi-Year Induction Programs and the Effect of Additional Support

While many induction researchers argue that “more is better,” there is little research about multi-year induction programs and their impact upon teacher self-efficacy, instruction, or even retention. Those in education are likely to argue that learning to teach is not a one-year process, but a career-long journey of refining instruction (Wong, 2004). Nevertheless, the majority of the reviewed studies examined one-year induction programs (because the majority of induction programs last for one year) and did not explore how additional professional development and support might have helped improve the development of beginning teachers.

Despite this focus upon one year programs, two well-known studies, Youngs (2002) and Glazerman et al. (2010), have analyzed the benefits of multi-year induction programs. Youngs (2002) evaluated the Connecticut Beginning Educator Support and Training (BEST) program, an initiative that provided novices with three years of professional development and the weekly support of a trained mentor. All mentors received 24 hours of mentor training and were encouraged to co-plan units and help their mentees reflect upon their instruction. Mentors and district administrators modeled best practices and performed demonstration lessons in teachers’ classrooms, worked with novices to design lessons, and discussed philosophies of classroom management. At the end of the three years, novices were also expected to complete a rigorous portfolio that demonstrated their growth in understanding curriculum, implementing sound instructional practices, and raising student achievement. If a novice’s portfolio was deemed subpar at the end of the three years of teaching, then that novice would not receive a permanent teaching license. The portfolio scorers, who were often veteran colleagues, worked with the novices’ mentors to provide guidance throughout the induction experience.
The study focused upon the various induction supports and how they might have impacted attrition, but also mentioned how instruction was impacted. Youngs (2002) noted that the multi-year program had given novices more time with mentor teachers and greater focus upon student achievement. Youngs (2002) observed novices collaborating with school leaders and veteran peers and the pervasive dedication in these meetings to increase student achievement. Teachers were expected to apply what they learned during these sessions in their classroom and then bring questions and concerns to the next meeting for advice and feedback. The requirement that they create a portfolio also helped novices reflect upon their craft and provide examples of how their instruction had progressed and impacted student achievement over the three year period.

After three years, Youngs (2002) compared attrition data from the two BEST schools he worked with and two non-BEST schools with similar socioeconomic backgrounds. He found that attrition and migration were lower for BEST novices than those who were not in BEST programs. However, the author did not control for other factors such as administrative support, teacher background, or school culture. Regardless, the two BEST program districts had retention rates of 87.3% and 91.2%, which as Youngs (2002) points out, were significantly higher than other urban school districts with similar socioeconomic backgrounds.

In another study of multi-year induction programs, Glazerman et al. (2010) utilized a randomized control trial design so they could isolate the impact of a treatment (a two-year induction program) and control for other factors such as personal characteristics and school setting. The authors’ goal was to determine how multiple years of intensive professional development and mentor support might influence novices’ retention, classroom practices, and student achievement. Over 1,000 beginning teachers from 418 schools in 17 large, low-income
public school districts participated. The 418 schools were randomly assigned to either one of two treatment conditions—professional development provided by Educational Testing Services (ETS) or the New Teacher Center (NTC) over two years—or a control condition in which schools continued to implement their one-year induction programs. Some of the control schools had only mentoring programs, others offered mentoring as well as novice-specific professional development sessions. Both the one and two year programs employed what is considered “best practice” (Ingersoll & Smith, 2003; Smith & Ingersoll, 2004; Wong, 2004); novices attended weekly meetings with a full-time trained mentor, participated in monthly professional development programs, observed veteran colleagues, and received administrative feedback about their practice. The novices were followed for three years; researchers analyzed classroom observations, teacher retention data, and student tests scores for each year.

The findings were mixed; classroom observations in the first year of the study demonstrated no differences between the groups. Yet there were no classroom observations in year two or three. There was also no significant difference in the groups regarding retention, though teachers who received more induction support reported being more satisfied with their profession. Lastly, while there were no significant differences in student achievement between teachers in the treatment and control groups after the first two years, researchers found significant differences in the third year of teaching. Glazerman et al. (2010) report, “...after two years of receiving comprehensive induction, the scores of students taught by such teachers significantly improved” (p. 31). On average, multi-year induction teachers were able to increase students’ reading scores by four percentage points and math scores by eight percentage points more than their peers who only participated in a one-year induction program.
These mixed results (significant differences in student test scores but not in retention or classroom instruction), might be due to how much the control groups differed in their induction programs. The authors shared that some of the control group schools provided as much support and professional development as the treatment schools. Furthermore, in the treatment schools, the professional development sessions were not mandatory. As a result, only 20% of the novices attended at least 80% of the trainings (Glazerman et al., 2010). Since so many of the teachers did not attend the specified amount of professional development and control groups might have had a similar amount of induction support, it is hard to compare treatment and control groups. However, practitioners and researchers alike should note the significant difference in student test scores between teachers who participated in multi-year induction compared to those who only received one year of support. This important finding demonstrates that induction programs do not necessarily show a benefit to teacher practice until after the second or third year of support.

The lack of research about multi-year induction programs needs to be remedied, since as Wong (2004) argues, “Learning to teach is a development process that takes several years” (p.48). Common sense suggests that teachers will probably be more satisfied, effective, and efficacious if they have an effective mentor and helpful novice-specific professional development for more than one year. Yet administrators and policymakers require more evidence about how long induction programs should be before they will be likely to create programs that are cost efficient and also effective in developing and retaining effective educators.

Conclusions

Teacher attrition costs the United States about $7 billion per year for recruitment and training of replacement teachers, yet addressing teacher turn-over is more than a monetary issue
(Perrachione et al., 2008). School cohesion, morale, and student achievement are also at stake (Boe et al., 2008). While teacher attrition research highlights the demographics of teacher flight (who departs, where they leave, and why), novice teachers are the most likely to leave the profession mainly because they lack self-efficacy and/or cannot deliver effective instruction.

This literature review was focused upon the “three-legged stool” of induction research and how these programs might influence novice teachers’ self-efficacy, instruction, and/or retention. It discussed the phases of early teacher development, how self-efficacy can impact novices’ development, what is known about induction programs, and how multi-year induction programs might have an influence upon attrition rates, instructional practice, and/or student achievement. Overall, research indicates that induction programs increase teacher self-efficacy, improve instruction, and decrease attrition and that “successful” programs include educative mentoring, multiple mentors, administrative support, access to veterans’ expertise, and ongoing, novice-specific professional development.

In Robbinsville, we strive to have a four-year induction program that includes research-based best practices that help novices not only develop survival skills, but also instructional expertise that helps them meet diverse student needs (Fuller & Brown, 1975; Leithwood, 1990). These practices include offering mentorships with both veteran colleagues and administrators, providing opportunities for novices to participate in coaching cycles and “learning walks” so that they can learn from instructional leaders throughout the district, facilitating novice-specific professional development experiences that slowly shift towards complex instructional strategies, and having a cohort model to help ameliorate novices’ feelings of isolation.

Though researchers believe that these components are important elements of best practice, they are still unclear about how long the induction process should be. My research
aimed to study teachers’ perceptions of their self-efficacy and instructional practice over the course of this four-year induction program so that Robbinsville can determine if having such a lengthy support system continued to have a positive influence on novices’ sense of self-efficacy and instruction as they experienced each year of the program.
Chapter III
Methodology

Research Design

Because the purpose of this evaluation is to examine novice teachers’ views of the Robbinsville multi-year induction program and how they believe it influences their self-efficacy and instruction, I have utilized a case study approach. Case studies allow researchers to deeply explore how individuals experience a program, event, or process (Creswell, 2009). Much of the research base about induction programs analyzes large-scale data, but I chose to conduct a more in-depth, participant-centered case study that uses thick, rich description to analyze how the Robbinsville multi-year induction program is impacting teachers. This choice is appropriate because a teacher’s self-efficacy and instructional practice are highly personal; in this case, words and experiences are more illustrative than quantitative data. I intend to use these shared experiences to refine our existing New Teacher Induction program and better meet our novice teachers’ needs.

The evaluation’s design includes separate focus group interviews with members of the Year 2, Year 3, and Year 4 teacher cohorts as well as a follow-up qualitative survey for all Year 2, Year 3, and Year 4 novice teachers. Focus groups took place in October and November, 2016 and the qualitative survey was shared in November 2016 with follow-up email reminders to complete the survey in December, 2016 and January, 2017. All three cohorts had a representative focus group as well as a qualitative survey about their induction experiences; these interviews and survey protocols are unique since each cohort provided feedback about the year of induction support they had just received. However, each cohort also had some common questions so that I could compare teachers’ perceptions across each year of induction. By analyzing teacher
feedback about each individual year of the program, I was able to identify how each year might be influencing teachers’ self-efficacy and/or instruction as well as investigate how each year of the program builds upon previous ones.

While the focus group aimed to establish a broad picture of teachers’ perceptions of the program, the survey asked for specific feedback about program elements such as mentoring, after-school meetings, and other professional development opportunities provided throughout a given year. It was sent to all Year 2, Year 3, and Year 4 teachers (n=50). The survey also acted as a “check” of focus group data; I wanted to see if what teachers said in a group setting aligned with what they shared in an anonymous survey.

Further, to collect more “real-time data,” I reviewed all of the anonymous Robbinsville professional development evaluation forms that Year 1, Year 2, Year 3, and Year 4 teachers (n=80) completed during their October, November, and January New Teacher Induction meetings (see Appendix D). To gather this data, I utilized existing Robbinsville professional development evaluation forms that are distributed after every induction session. Finally, I conducted one-legged interviews, which typically allow the interviewer to informally ask teachers “How’s it going?” about a new educational initiative, practice, or professional development experience (Hall & Hord, 2001). I utilized the one-legged interviews as a member check and to help me make sense of the data. As I analyzed the focus group, survey, and evaluation form data, I facilitated four one-legged interviews of focus group members (one per cohort) to seek clarification and help me connect the data. Data collection took place from October, 2016 through January, 2017.

Setting
The study was conducted in New Jersey’s Robbinsville school district. This PreK-12 district is located in Mercer County and has three schools, approximately 3,200 students, and 300 classroom teachers. The district is a “I” district, (as labeled by the New Jersey Department of Education’s “district factor grouping”), which means it is in New Jersey’s second wealthiest group of schools. The student population is approximately 70% White, 20% Asian, 5% Hispanic, 2% Black, and 3% Other (NJ Department of Education, 2015). Our teachers do not reflect these demographics; most teachers are White and female. The majority of Robbinsville students meet or exceed expectations on annual standardized assessments such as the PARCC.

**Sample**

I recruited six Year 2 teachers (cohort size of $n=23$), ten Year 3 teachers (cohort size of $n=20$), and seven Year 4 teachers (cohort size of $n=7$) for focus groups interviews about the program. Year 2 teachers discussed Year 1 of the program, Year 3 teachers were asked about both Years 1 and 2 (with a focus on Year 2), and Year 4 teachers shared feedback about Years 1, 2, and 3 (with an emphasis on Year 3). The focus groups were separated into three cohorts so that I could analyze how each year of the program might influence self-efficacy and instruction (Creswell, 2009). This sample size allowed me to conduct focus groups with teachers from diverse grade levels and buildings yet still have a manageable data collection schedule.

The focus groups occurred in October and November 2016 and utilized criterion sampling; participants had to be a Robbinsville employee with only one, two, or three full years of teaching experience (Patton, 1990). Volunteers were recruited in-person during one of the district-mandated professional development sessions in September, 2016. At that time, I introduced my research goals to the Year 2, 3, and 4 teachers and asked for volunteers. It should be noted that my pool for possible participants was limited, there are approximately 70 Year 2,
Year 3, and Year 4 educators but some have previous teaching experience and/or are not classroom instructors. Since my research was focused upon the novice classroom teacher experience, my pool was limited to about 50 Year 2, Year 3, and Year 4 teachers.

Once I received the list of volunteers, I selected the candidates for Year 2, Year 3, and Year 4 focus groups. Since I originally had twelve volunteers for the Year 3 focus group, I divided the group so that one focus group was amongst eight primary school teachers and one was with four secondary teachers. However, at the last minute two secondary focus group teachers could no longer attend so I only had two secondary teachers. An additional Year 2 Robbinsville teacher volunteered, but he had previous teaching experience. I decided to include him in the focus group to help facilitate the conversation (otherwise I would have had only two participants). However, I did not include his responses in the data set since he had previous teaching experience.

I contacted the volunteers via email to establish an introductory meeting about my research and answer any questions. I also used this meeting to review the consent forms for participation and audio-recording. Participants initialed every page, signed the forms, and received a signed and dated copy of their consent. Please note that the focus group form also included consent to participate in follow up interviews. Because all the subjects were adult English-speakers, no additional consent forms were required. Please see the table below for information about the focus group participants; the names are all aliases.

### TABLE 2 Focus Group and One-Legged Interview Participants

<table>
<thead>
<tr>
<th>Teacher Alias</th>
<th>Grade Level/Subject Area</th>
<th>Number of Years Teaching</th>
<th>Participated in a One-Legged Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 4 Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Megan</td>
<td>4th grade</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Jen</td>
<td>4th grade</td>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>Name</td>
<td>Grade</td>
<td>Year</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Melanie</td>
<td>2nd</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Chloe</td>
<td>4th</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Nate</td>
<td>4th</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Paula</td>
<td>4th</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Dave</td>
<td>4th</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3 Primary Teachers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sarah</td>
<td>3rd</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Reagan</td>
<td>2nd</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Brad</td>
<td>3rd</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Jackie</td>
<td>2nd</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Jamie</td>
<td>1st</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Lizzie</td>
<td>2nd</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Kelsey</td>
<td>1st</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Lisa</td>
<td>3rd</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3 Secondary Teachers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clara</td>
<td>High School Special Education</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sam</td>
<td>High School Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Ken</td>
<td>High School Social Studies</td>
<td>6* (data was not included because of previous teaching experience)</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2 Teachers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amber</td>
<td>2nd</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Michelle</td>
<td>1st and 4th grade Special Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hannah</td>
<td>High School Science</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Samantha</td>
<td>High School Science</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Addison</td>
<td>High School Spanish</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Anna</td>
<td>Middle</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
As for the qualitative survey, after conducting the focus groups, I emailed all Year 2, Year 3, and Year 4 novices \((n=50)\) in November, 2016 to ask them to complete an online questionnaire about their experiences. If they were willing, teachers submitted an online version of the consent form and then completed the anonymous survey. A consent form was embedded into the top of the online survey. I struggled throughout November and December of 2016 to collect survey responses; I sent three reminders and was able to analyze seven Year 2 surveys, twelve Year 3 surveys, and six Year 4 surveys \((n=25)\). I was aiming for at least a 60% response rate since this is the usual return rate for district professional development surveys, which would have been 30 responses. Instead, I received a 50% response rate.

Because professional development evaluation forms are part of the Robbinsville New Teacher Induction program, all Year 1 \((n=30)\), Year 2 \((n=23)\), Year 3 \((n=20)\), and Year 4 \((n=7)\) teachers’ feedback are included in my data collection. While I reviewed Year 1 teachers’ evaluation forms, these teachers did not participate in focus groups or complete the open-ended survey. By November 2016, Year 1 teachers had only attended three days of Summer Orientation and two after-school professional development sessions; they would not have had enough professional development to reflect upon the program. Regardless, I included their evaluation forms in my data collection to analyze their views of the introductory program meetings and how these specific sessions might have influenced their self-efficacy and instructional practice.

As for the “one-legged” interviews, my only criterion for participating in this stage of the study is that the teacher had participated in a focus group. That way he/she was familiar with the study and had also provided his/her consent for a possible follow-up interview in the focus group.
consent form. Once I began to review the data, I determined that I would conduct four one-legged interviews (one for each focus group) so that I could follow-up with teachers who had shared something interesting, if I sought clarity about something they shared, and/or I wanted their thoughts on how the survey and evaluation data connected to what was said in a focus group.

Data Collection

As I was interested in examining how teachers view the induction program and its’ influence on their self-efficacy and instruction, I conducted focus groups, distributed an anonymous qualitative survey about teachers’ experiences, reviewed professional development evaluation forms, and conducted one-legged interviews. These data collection strategies were appropriate because they encourage teachers to both collectively share their views of the program as well as their individual thoughts about how these professional development experiences shape their self-efficacy and instruction.

Focus group interviews. As Patton (1990) states, “the purpose of interviewing is to find out what is in and on someone else’s mind” (p. 278). To answer the research questions, I needed to discover what was in and on these teachers’ minds. Interviews allow for in-depth probing and for the researcher to gain greater insight into the participants’ world (Patton, 1990). As these teachers were in multiple buildings and grade levels, focus group interviews permitted me to meet with these teachers throughout October and November, 2016 while also maintaining my responsibilities as a Robbinsville administrator. Each cohort participated in one focus group; these meetings were after-school and were located in a conference room at Robbinsville High School. The focus groups allowed me to gain multiple perspectives of the program and determine commonalities and differences in opinion. Further, a focus group format encouraged
participants to add on and react to others’ comments; this interactivity would not have occurred in a one-on-one interview.

The three separate focus groups for Year 2, Year 3, and Year 4 teachers took place in the fall of 2016 so that teachers could reflect upon the previous year’s induction program before becoming fully entrenched in their 2016-2017 induction sessions. The focus groups were semi-structured open-ended interviews (Patton, 1990). This more fluid format allowed for unanticipated topics to emerge and permitted me to respond to and further probe participant’s responses. Focus group questions were determined by reviewing existing qualitative studies about induction programs, examining those studies’ data collection tools (Cherubini, 2009; Davis & Higdon, 2008, Tschannen-Moran & Woolfolk Hoy, 2007), and revisiting my theoretical framework and research questions. Finally, I included some questions that asked specifically for feedback about the induction process. These questions were included so that teachers could share the perceived benefits and drawbacks of participating in a multi-year induction program and how the district could revise the program to better support self-efficacy and instructional practice.

Consequently, each focus group guide was separated into four main sections: how teachers’ self-efficacy and instruction have changed over time, teachers’ views of the previous year’s professional development, their perceptions of how the program might have influenced changes in self-efficacy and instructional practice, and an opportunity to offer general feedback about the Robbinsville New Teacher Induction Program. The Year 2, Year 3, and Year 4 focus group guides were similar in their structure and focus, but some of the questions were unique since they were about each particular year of professional development. In fact, the Year 2 focus group guide had an additional section because a vital part of the Year 1 program includes mentoring which is not a feature of subsequent year induction. This section asked about the
mentor process and how this support might or might not increase self-efficacy and improve instructional practice. Although the questions were open-ended, I used a structured protocol so that each focus group was conducted in the same manner. Appendix B contains my focus group interview guides. All sessions were audio-recorded using the Audio Note program so that my findings could more accurately represent the teachers’ views (Creswell, 2009). At the conclusion of each round of interviews, I used the website Rev.com to get the audio-recordings transcribed and then I coded the data to determine themes and patterns.

**Qualitative Google Forms survey.** After conducting the three focus groups, I asked all Year 2, 3, and 4 teachers in November, 2016 (with reminders in December, 2016 and January, 2017) to complete an anonymous online survey via Google forms. Each cohort had a unique twenty or twenty-one question survey about the previous year’s professional development experiences. The qualitative surveys (Appendix C) aimed to uncover additional information about the induction program.

Like the focus groups guides, the surveys were based upon my research questions and theoretical framework, but also allowed novices to provide open-ended feedback about the program. The survey was separated into three major areas. To begin, teachers were asked to provide a general reflection of how their self-efficacy and instruction might have changed from the previous year. They were then asked to provide feedback about the previous year’s professional development and if they felt the program supported their self-efficacy and instruction. Finally, the survey ended with questions about additional professional development opportunities that might have influenced their self-efficacy and practice.

The survey questions overlapped with some of the focus group questions, but were more specific since the checkbox format encouraged teachers to select which components of the
program and outside professional development experiences they found the most beneficial to their self-efficacy and instruction. While the focus group aimed to establish a broad picture of teachers’ perceptions of the program, the survey asked for feedback about specific program elements such as mentoring, after-school meetings, and other professional development opportunities provided throughout a given year. It was sent to all Year 2, Year 3, and Year 4 teachers (n=50). I also wanted to see if what a small number of teachers say in a group setting aligned with what they shared in an anonymous survey. However, I realized after data collection that I would be unable to determine how much overlap there was between focus group ad non-focus group participants. Regardless, seven Year 2 teachers, twelve Year 3 teachers, and six Year 4 teachers (n=25) completed surveys. As with the focus group transcripts, the data was coded to determine themes and patterns (Creswell, 2009).

**Professional development evaluation forms.** To garner data as the program was occurring, I also reviewed the New Teacher Induction program’s professional development evaluation forms that teachers completed anonymously during their September/October, 2016, November, 2016, and January, 2017 induction meetings. This data allowed me to determine how teachers viewed the induction program while they were experiencing it rather than solely reflecting upon the previous year’s professional development. I also wanted to know if the cohorts had similar views of how each year of the program influenced their self-efficacy and instructional practice, i.e. did both Year 2 teachers and Year 3 teachers provide the same feedback about the Year 2 program?

The October evaluation forms asked teachers about their perceptions of the professional development session and their intent to apply their learning. The November and January feedback forms had teachers reflect upon the previous session and how it might have influenced
their self-efficacy and instructional practice. All teachers who were new to Robbinsville attended the induction meetings, whether they were truly novices or had years of experience. Consequently, the forms asked teachers to provide the total number of years they have been a teacher (including time spent before coming to Robbinsville) so I was able to determine which responses were from novice Year 1, Year 2, Year 3, and Year 4 teachers. Since these anonymous forms were a part of the Robbinsville New Teacher Induction program, I added a notice about the study at the top of the form and teachers could check off whether they wanted their anonymous feedback to be included in the program evaluation. I collected 27 Year 1 forms, 17 Year 2 forms, 20 Year 3 forms, and 7 Year 4 forms in September/October, 2016 \( (n=71) \), 29 Year 1 forms, and 19 Year 2 forms in November, 2016 \( (n=48) \) (Year 3 and Year 4 teachers only meet three times a year), and 15 Year 1, 20 Year 2, 20 Year 3, and 7 Year 4 forms \( (n=62) \) in January, 2017.

The September/October forms were distributed at the conclusion of the meeting, the November and January forms were provided at the beginning of the meetings since they asked teachers to reflect upon how they implemented (or not) a strategy learned during the previous session. All forms were distributed by hand and teachers submitted their anonymous evaluation forms in a basket as they left the session.

As mentioned previously, while I reviewed Year 1 teachers’ evaluation forms, they did not participate in focus groups, one-legged interviews, or complete the open-ended survey. By November 2016, they had only attended three days of Summer Orientation and two after-school professional development sessions. Year 1 teachers did not have enough professional development to reflect upon the program and its possible impact on their self-efficacy and instruction. Regardless, I included their evaluation forms in my data collection to analyze their
views of the introductory program meetings and how these specific sessions might influence their self-efficacy and instructional practice.

Data was coded to determine themes and patterns (Creswell, 2009). Since these anonymous evaluations are part of the Robbinsville New Teacher Induction program, I share access of the forms with the Robbinsville Curriculum and Professional Development office. When I finished analyzing the forms, the Curriculum and Professional Development office secured them in a locked filing cabinet.

**One-legged interviews.** The last element of data collection was one-legged interviews. I used the one-legged interviews as a member check and to help me make sense of the data. As I analyzed the focus group, survey, and evaluation form data, I conducted one-legged interviews of four different focus group members (one from each focus group) to solicit what they thought about connections between the different data sources and to ensure that I had accurately captured trends and patterns. I did not have a formal protocol for these interviews, but two questions were: “I notice ____ from the focus group data and ____ from the survey data, could you further elaborate why teachers might say this?” and “You mentioned _____ during the focus group, could you elaborate upon that?” My only criterion for participating in this stage of the study was that the teacher had participated in a focus group. That way he/she was familiar with the study and had also provided his/her consent for a possible follow-up interview in the focus group consent form. Interviews were audio-recorded and transcribed by hand since they were not long. I then reviewed the four interviews to build connections between the data sources and to confirm my preliminary findings. I did not consider these one-legged interviews as a separate means of data collection, but as a member check, a way to seek clarification, and to help assure reliability and validity.
Data Analysis

I began analysis by organizing and preparing the data, essentially transcribing, sorting, and arranging the focus group interview transcripts and survey submissions. Next, as Creswell and Plano Clark (2007) recommend, I read over the raw data to gain a general sense of meaning, writing notes and ideas for possible codes in the margins. After this step, I developed a set of etic codes that were tied to my theoretical framework of social cognitive/self-efficacy theory, literature about the novice teacher experience, and/or my research questions.

As I reviewed the data, I also employed emic or in vivo coding, where categories and terms are generated by the words of the participants instead of just the researcher (Patton, 1990). As Patton (1990) asserts, “What people actually say and the descriptions of events observed remain the essence of qualitative inquiry” (p. 457). After preliminary codes such as “feedback,” “administrative support,” “mentor support,” “confidence,” “change of practice,” and “observational learning,” were generated; I created a codebook to define each term. This codebook evolved as I re-reviewed each data set; that way I clarified my definitions, eliminated repetitive codes, and created a code for disconfirming evidence. The final codebook had 49 codes.

After identifying all the codes, I reread the data to ensure I had captured all possible codes and clearly defined them in my codebook. I developed a spreadsheet with all the codes and then checked off which codes were found in each data source. For example, I could see that “collegial support” was a code that appeared in 11 out of the 17 sources of data (each focus group, cohort survey, and round of professional development evaluation forms). As I looked across the spreadsheet, I was able to write memos about recurring patterns across the data sources so that I could reduce the data into categories and begin identifying emergent themes. At
this point, I had identified approximately 17 themes that could be collapsed into categories that tied to different aspects of self-efficacy theory (ex: Developing Mastery Experiences), elements of the induction program that appeared to improve self-efficacy and instruction, and perceived programmatic needs. I was able to generate these overarching categories by creating labels for each of the 17 subthemes and organizing them so that they were grouped together by like ideas, inductively creating five overarching themes. I then went through each data source and copied and pasted coded lines that aligned with each of the major themes. While tedious, this process helped me to see how themes not only transcended data sources, but also across years in the program. I then used this document of themes and linked data to create an outline for Chapter 4, which consists of my findings.

**Trustworthiness**

Qualitative reliability implies that research is accurately documented and interpreted. To achieve reliability, I reviewed the interview transcripts for possible errors and revisited all codes to confirm that there were no shifts in definition during the coding process. Since I am the sole researcher, I identified a peer familiar with qualitative research to cross-check my codes for inter-coder agreement, defined as, “...when two or more coders agree on codes used for the same passages in the text...” (Creswell, 2009, p. 191). After collaboratively reviewing the coding scheme, we determine that we achieved inter-coder agreement; experts recommend for codes to be in agreement at least 80% of the time (Creswell, 2009). I also asked my colleague to review memos and preliminary findings for bias; I did not want my own views of the New Teacher Induction program to heavily influence my analysis of the data (Miles & Huberman, 1994).

After coding the data, I intended to employ triangulation as a way to increase trustworthiness. Yet I realized after data collection that I could not be sure how many survey
participants were also focus group members. Still, focus group interviews were reviewed first to establish a broad picture of induction, teacher self-efficacy, and instruction. Survey responses were then analyzed to determine what teachers were saying about specific elements of the induction program’s professional development. Next, I reviewed the program evaluation forms to determine if different cohorts shared similar views of a given year of the induction program. Finally, I conducted one-legged interviews with four focus group members to seek clarification and confirmation of my preliminary findings. These data sources worked together to answer the research question of how self-efficacy and instruction change over time and how this program might influence teacher self-efficacy and instruction. Please see the table below for further clarification.

TABLE 3 Overview of the Data Collection and Analysis Process

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Participants</th>
<th>Purpose</th>
<th>Timeline</th>
<th>Analysis</th>
</tr>
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<tbody>
<tr>
<td>Focus groups</td>
<td>Focus group #1: 6 Year 2 teachers Focus group #2: 8 Year 3 Primary teachers Focus group #3: 3 Year 3 Secondary Teachers (1 not counted because of previous experience) Focus group #4: 7 Year 4 teachers</td>
<td>Cohorts of teachers collectively reflected upon the previous year’s induction experience</td>
<td>October-November, 2016</td>
<td>Reviewed to establish a broad picture of induction, self-efficacy, and instruction</td>
</tr>
<tr>
<td>Qualitative Surveys</td>
<td>Anonymous volunteers from the Year 2 (n=7 out of 23), Year 3 (n=12 out of 25)</td>
<td>Cohorts of teachers individually reflected upon the previous years</td>
<td>November, 2016-January, 2017</td>
<td>Reviewed to act as a “check” of focus group data to see if what teachers say in a</td>
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20), and Year 4 cohorts \( n=6 \) out of 7

<table>
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<tr>
<th>Program Evaluation Forms</th>
<th>All Year 1, Year 2, Year 3, and Year 4 teachers ( n=80 )</th>
<th>All cohorts completed Robbinsville professional development evaluation forms about their current induction experiences</th>
<th>October, 2016-January, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Reviewed to determine if cohorts share similar views of the induction program (Year 1 and Year 2 teachers will both reflect upon specific elements of the Year 1 program) and provide “real-time” data about the program instead of solely relying upon teachers’ memories of the previous year</td>
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One-legged interviews | Focus group members, (based upon need) \( n=4 \) | Interviews provided clarification, reconciled any gaps in the data, and connected findings across the data sources | October, 2016-January, 2017 |
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<tbody>
<tr>
<td></td>
<td></td>
<td>Utilized throughout the analysis process to “member check” and build connections across the data sources</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Overview of the Data Collection and Analysis Process; Adapted from Fitzpatrick, Sanders, & Worthen (2011).

Validity
After determining the study’s reliability, I then investigated its internal validity to learn if my findings were perceived as accurate by all participants. To begin, I cross-referenced the data to show how the chosen themes emerged from several sources and are not just from one individual teacher or survey question. I started with focus group interviews to establish a broad picture of induction and teacher self-efficacy then shifted to the individual survey responses and professional development evaluation forms (Miles & Huberman, 1994). Afterwards, I reviewed the different data sources to determine if information shared during one form of data collection, such as the focus groups, aligned to data gleaned from another, such as anonymous survey or evaluation form. Since I placed each code and data source in a spreadsheet, I could easily determine which codes were used in each source of data and ensure that a theme was across more than one data source.

Throughout the data analysis process, I utilized member checking, or confirmed with participants that my descriptions and chosen themes accurately represented participants’ views and experiences. To do so, I sent my notes and memos to focus group members to ensure what I captured accurately reflected their conversations. Further, my one-legged interviews acted as a member check; I interviewed four focus group members (one from each focus group) after our discussion about my preliminary findings and any gaps or inconsistencies in the data.

This member checking is referenced in my audit trail, where I documented the various steps I made through the research process so that outsiders can understand my rationale, data collection methods, analysis, and if need be, easily replicate the study. After I wrote the first draft of my findings, I had peers from my dissertation group ask questions about how codes were determined and defined, as well as how I conducted the analysis process. This work, otherwise known as peer debriefing, helped clarify my writing and ensure that, “...the account will resonate
with people other than the researcher” (Creswell, 2009, p. 192). Finally, I disclose the bias I bring to the study; my interpretations of the findings are bound to be influenced by my role as a Robbinsville school district administrator.

**Researcher Role**

From December 2014 until June 2016, I was the K-8 Supervisor of Curriculum and Professional Development for Robbinsville. One of my duties as a supervisor was planning and facilitating the New Teacher Induction program. As of July 2016, I serve as the acting Assistant Superintendent of Curriculum and Instruction. I now oversee the district’s programming as well as all of its professional development (including the New Teacher Induction program). Both of these roles have allowed me to establish relationships with novice teachers, but also pose some difficulty for conducting this study. One such issue is fear that participants will want to please me and might not be as candid about the program as they would be with an external researcher. Consequently, I included anonymous surveys and evaluation forms in my data collection and organized the teacher observation schedule so that I was not evaluating any teacher who participated in a focus group. That way, teachers might be inclined to be more honest about the program since I was not evaluating their instruction and they were completing anonymous surveys and evaluation forms. Further, participation was voluntary and did not impact evaluation scores or recommendations for contract renewal.
Chapter IV

Findings

The purpose of this study was to answer the research question, “From a novice teacher’s perspective, in what ways does the multi-year induction program in the Robbinsville School District contribute each year to changes in his/her self-efficacy and instructional practices?”

This chapter presents findings from my analysis of focus group interviews, qualitative Google surveys, district professional development forms, and one-legged interviews where teachers described their experiences in the Robbinsville multi-year New Teacher Induction program and its perceived influence upon their self-efficacy and instruction.

Research about induction program has shown that providing involved mentor teachers, administrative support, ongoing professional development, and continued feedback about progress reduces novice teacher attrition, increases feelings of self-efficacy, and improves instructional practices (Ingersoll, 2001; Kardos et al., 2001; Smith & Ingersoll, 2004; Strong, 2009). During data analysis, it became apparent that the study’s major themes tied to these best practices as well as self-efficacy theory, my theoretical framework. These themes include learning and developing mastery experiences over time, having the ability and willingness to experiment and take risks, how program curriculum met teachers’ developmental needs and influenced changes in practice, the importance of providing opportunities to “bridge the divide” between novices, veteran peers, and administrators, and the need for vicarious learning experiences. Throughout the description of each theme, I also include a discussion on how the induction can be further refined to improve teachers’ self-efficacy and instructional practice.

Theme #1: Acknowledgement that Learning and Development Happen Over Time
The first overarching theme to emerge was that the novices felt the program enabled them to learn and implement research-based instructional strategies over time rather than over the course of one single year. Promoting the idea of developing over time appeared to result in positive changes in practice as well as perceived levels of self-efficacy and tie to two aspects of self-efficacy theory—mastery experiences as well as emotional and psychological arousal (Bandura, 1997; Skaalvik & Skaalvik, 2010). Further, teachers, without being aware of Fuller and Brown’s (1975) Stages of Concern model, shared how the multi-year program acknowledged that they needed to develop “survival skills” before learning complex instructional strategies in their first year. While some novices mentioned that the multi-year program was much more of a time commitment than a one-year induction program, an overwhelming number of Year 2, 3, and 4 teachers stated that they appreciated that the program was over four years since it allowed for slowly developing mastery and that they were not expected to become master teachers after one, two, or even three years of teaching.

This expectation allowed teachers to feel they could develop mastery experiences, or actual accomplishments in teaching and student learning, over time and positively impacted their sense of self-efficacy (Bandura, 1997). It should be noted that the professional development evaluation forms did not support this theme since the forms focused upon change in practice and confidence levels rather than an overall view of the program. Therefore, Year 1 teachers will not be discussed since they contributed only to that one source of data and cannot share how they learned over time.

*Year 2.* In the Year 2 surveys, the teachers disclosed that the multi-year program helped them gain confidence and feel supported as they grew into the profession. Though the teachers were only in the middle of the second year when they completed the survey, responses included,
“I think it’s important to have a multi-year induction program because it is likely that our positions change yearly (special education). In these different positions I am going to face different types of situations. The induction program gives us a place and time where we can discuss these issues,” as well as “Every year offers new experiences and challenges so it is helpful to have a space and group of peers to share ideas and experiences with,” and “[A benefit of having a multi-year program is] learning something new each year-continuing to grow with some help.” The participants felt that program acknowledged that novices are bombarded with different responsibilities and challenges each year as they develop their craft and that professional development should be ongoing, which ties to research about effective professional development practices (Feiman-Nemser et al., 1999; Smith & Ingersoll, 2004). It might be that because of this emphasis upon a slow development of mastery experiences, teachers’ perceived self-efficacy was positive. Participants shared that they felt more efficacious because they knew they had time to develop expertise and as one secondary teacher shared, were not expected to be “experts after a year.” Instead, they could develop at their own pace and feel positive about their accomplishments as they acquired them. The only perceived drawbacks of learning over time in a multi-year program was that three survey respondents out of the seven mentioned how the program added responsibilities over four years instead of one.

The Year 2 focus group teachers echoed the Year 2 survey participants. Amber, an elementary school teacher stated, “I like that this is a multi-year induction program. I think if everything was tried to fit in one year, it would’ve been just crazy. This is my second career. One thing that drew me to this profession is that you're constantly learning and things are constantly changing.” This theme of constant change was echoed by her colleagues. Addison, a Spanish teacher, discussed the differences between Year 1 and Year 2:
I think it's [Year 2 PD] still beneficial because even though this year I feel more confident, I obviously have some experience. This year I'm teaching a new level. I still have challenges. I'm still learning. I think just having the space to share what other year two teachers are experiencing, but also this year we're talking about different topics that we didn't talk about last year. I feel like there's so much to learn. Every year there's going to be new things. I think having those meetings is still beneficial, still able to use in the classroom.

Samantha, a high school Science teacher, agreed with the idea that so much learning occurs between Year 1 and 3:

Something my co-op always told me from when I had student taught is you don't really hit your stride of teaching until about year three. Year one, you're just trying to survive. Year two, you've got everything down, but you want to fix the things that didn't go well in year one. You're still putting in a lot of time. It's not even that you're perfecting your practice, but you're not totally taking in everything that you've learned until year three just because you physically haven't had the time to.

The multi-year induction program communicates to novices that the district understands that developing confidence and expertise take time. Samantha shared, “That's my favorite part of being a teacher. I get to be a learner still. I think the program fosters that idea.” This support and emphasis on learning over time helped the Year 2 teachers feel more efficacious as they moved through the induction program and developed their own mastery experiences.

Year 3. The Year 3 survey results about benefits of a multi-year induction program and learning over time were, at first, remarkably similar to Year 2 findings. For example, some responses were, “I have felt supported throughout my induction process, where as I know other schools only have one year,” “It is great to be constantly learning and growing as teacher,” “Everything can't be learned in a year-it is a natural gradual release model,” “Support is there over time, as opposed to a single moment,” “It's easier to digest the information and include it into my instruction over time,” and “[The program provides] continued support, checkpoints, and inspiration.” As with the Year 2 survey participants, the Year 3 teachers recognized the benefits of learning over time upon their instruction and level of self-efficacy but two of the twelve also
shared that the program provided “More work to accomplish outside of normal job duties” and “The time attending additional meetings can sometimes be a drawback as it takes away from planning and preparation time.” When designing future program experiences, I must consider how to balance providing professional development to encourage development of mastery experiences over four years without burdening teachers with too many meetings and/or tasks.

The Year 3 focus group participants also believed the multi-year program’s emphasis of learning over time to be beneficial to their self-efficacy and instructional practice. Clara, a secondary Special Education teacher, commented:

I think one benefit of having it be four years rather than just the one year, knowing that ... administration and the district [are present] and you have that support still. You're not just on your own, if you do have a question, that there's people here that you can talk to and feel comfortable bringing up your concerns, your questions, and you can have that opportunity to learn from your coworkers and learn from veteran teachers, and get some of those other insights and ideas of what has been working really well, what are some of those research-based strategies that we're learning about that you can incorporate new ideas and really focus on how to improve your teaching. As you said before, about how we're always still learning. It's something that we're never ... becoming that perfect teacher, that's something that you always want to strive to be, and continuing to grow upon yourself in order to benefit your class and your students.

Sam, a secondary Business teacher, also believed that sometimes it was hard to balance the induction program sessions with coaching, lesson plans, and other professional responsibilities, but like Clara, felt it was important to grow over the course of the program and was the first to mention how the later years of the program ensured he did not stagnate and continued to develop mastery experiences:

I also think it's very beneficial because it challenges you to continue to practice and get out of your comfort zone. It makes you stay on top of new strategies, it makes you stay on top of different ways to do things and exploring how to become a better teacher, whereas if it was just a one-year program you might just stop and say, ‘Okay, I'm comfortable here as long as I get good scores.’ The four-year program really encourages
you to challenge yourself to become a better teacher.

Similar to Sam, Jackie, an elementary school teacher, viewed the multi-year program as a motivator and as a way to not only challenge herself, but also to feel efficacious:

I think it also keeps our momentum going. Sometimes, you have that drive your first year. You want to do great. Your second year you might be discouraged. In third year, you'll get discouraged. For this you don't really get discouraged because you know the problems are different. You know everyone's facing them. You know there's ways to get around them and ways to solve them. You're reassured and you feel like you're something that everyone has invested in, is backing and helping. I don't know. You just feel like you still love what you're doing, want to do it, want to learn, and there's a lot to learn. It keeps you interested and asking questions.

Sarah, another elementary school teacher, recognized that each year of learning builds upon another, “In your first year, you're learning so much of everything but just to learn that little bit extra that you wouldn't be learning inside the classroom. Then year two and year three, I feel like, is the ultimate learning. Then being able to turnkey, that's a whole other skill that you're gaining. I think it's awesome.” Her colleague Lisa, also an elementary teacher, echoed this sentiment and that the consistent professional development and learning over time helped them slowly implement best practices and not form “bad habits.” Overall, the Year 3 teachers viewed the program’s four year time span helped intentionally improve their instruction throughout the program, challenge them to try new things outside of their “comfort zone,” and provide a continued support that helped maintain or increase their perceived level of self-efficacy and development (Fuller & Brown, 1975; Smith & Ingersoll, 2004; Strong, 2009). Unlike Year 2, the Year 3 participants particularly emphasized how the program challenged them to continue to grow and to maintain, as one teacher put it, “momentum” in developing mastery experiences that helped them feel more confident in their practice.
Year 4. The Year 4 survey participants did not include as much detail about how learning and developing mastery experiences over time might have influenced their instruction and/or self-efficacy, but one respondent shared, “This multi-year induction program has truly given me an opportunity to reflect on my practice and how much I've grown since my first year as a teacher” while the others all stated that the four years positively benefited their instruction and level of confidence. Once again, two teachers shared that the length of the program continued to motivate them to try new things and develop mastery in action research (and eventually leading their own professional development sessions). Unlike Year 2 and Year 3, none of the teachers discussed drawbacks of a multi-year program such as additional responsibilities and sacrificing planning and preparation time to attend professional development.

The Year 4 focus group participants reiterated the point that the multi-year program helped them learn more over time and enhanced their practice more than a traditional one-year program would. Melanie, an elementary teacher stated, “I was speaking with a friend of mine from college who teaches in another district, and I was like, ‘We do this and we do that’... and she was like, ‘Wow, like, that's really- you know, comprehensive.’ I feel like we have a lot of opportunities here to grow as a teacher, and I think that since I see so many teachers who are so dedicated and so motivated, it makes me want to, you know, meet that bar.” She also appreciated that she had ample time to try to meet that bar in a gradual release model rather than trying to meet the expectation of being perfect at the end of her first year (Fuller & Brown, 1975; Strong, 2009). Jen, another elementary school teacher, noted that even though her participation in the program is almost over, she is still evolving as an educator and that the program models lifelong learning, “I feel like I've grown so much with this program, but at the same time, we're still growing and the program itself is still evolving, and I love that.” Like the Year 2 and Year 3
teachers, the Year 4 study participants highlighted the need for support and ongoing professional development throughout years of teaching to develop effective instructional practices and positive levels of self-efficacy rather than within a one-year program (Wood & Stanulis, 2009; Youngs, 2002).

In summary, the first overarching theme of this study indicates that having the supportive context of a multi-year induction program helped them learn and develop mastery experiences over time and positively influenced teachers’ perceptions of their self-efficacy. Self-efficacy theory states that as one develops mastery experiences, he/she feels more efficacious. With four years of opportunities to develop mastery experiences, Robbinsville’s multi-year model is encouraging teachers to achieve these experiences and address their concerns over time with support of ongoing professional development (Fuller & Brown, 1975; Leithwood, 1990).

Research also indicates that for professional development to be effective, it needs to be sustained over time (Glazerman, et al., 2010; Leithwood, 1990; Smith & Ingersoll, 2004; Wood & Stanulis, 2009; Youngs, 2002). Despite this, many induction programs are designed for teachers’ first year only. The multi-year program, while it creates additional responsibilities for participants, creates ongoing professional development opportunities that communicate the district’s message that expertise develops over time and that novices are not expected to know everything within their first, second, or even third year of teaching. As Lizzie, a Year 3 elementary teacher commented, “A traditional [New Teacher Induction] model in one year is remarkably archaic. Especially the way teaching environment and everything is always changing. How else are we going to keep up, you know?” If the program ended after Year 1 or even Year 2, teachers described how they might have stagnated or lost momentum in Year 3 or Year 4 since they would have no longer received ongoing professional development and
feedback to help them continue to develop mastery experiences and positive self-efficacy.

Instead, in Years 3 and 4, the teachers reported that they were continuing to learn and develop in the context of the multi-year induction program.

Further, the district’s message that learning occurs over time might have been lost if the program was only one or two years long. Due to the multi-year design, novices did not feel overwhelmed by the expectation that they had to learn everything in a short period of time; they understood that they had longer to acclimate to the profession. This recognition of needing a longer time to achieve mastery resulted in emotional and psychological arousal that positively impacted their level of self-efficacy. The table below summarizes teachers’ perspectives with regard to the theme of learning over time.

TABLE 4 Key Findings by Year for Theme #1: Acknowledgement that Learning and Development Happen Over Time

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<th>Learning and Development Over Time</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<td>Teachers cited that they faced “new challenges” each year and that the program provided strategies to help face these obstacles. They appreciated attending professional development over time instead of learning everything in one year. This level of support and learning over time helped them feel efficacious.</td>
<td>Teachers shared that they are always “still learning” and that the program helped challenge them and get them out of a “comfort zone” and maintain momentum in developing mastery experiences. This continued push to learn over time helped them continue to develop mastery experiences that helped them feel efficacious.</td>
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Table 4. Key Findings by Year for Theme #1; Adapted from Fitzpatrick, Sanders, & Worthen (2011).

Theme #2: Increasing Openness to Risk-Taking and then Sharing the Results
Another critical teacher outcome was that novices felt the program helped them experiment and take risks in their classrooms, which was necessary for them to feel competent and efficacious as they grew into their roles. This idea ties to self-efficacy theory in that it relates to emotional and psychological arousal. Psychological and emotional arousal are shaped by the emotions that occur as a result of implementing a lesson. If teachers believe they successfully delivered instruction, then those positive emotions will help them associate teaching with a positive state of mind and ultimately help them be more receptive to other new teaching experiences and/or risk-taking (Fuller & Brown, 1975; Skaalvik & Skaalvik, 2010). If teachers believe they were unsuccessful in delivering instruction, their emotional and psychological states will be negatively impacted and teachers might be less willing to improve their practice if they do not receive adequate support in the form of verbal persuasion, resources, and/or ongoing professional development.

Further, if teachers are too overwhelmed or stressed, they will not be psychologically or emotionally able to receive feedback about their practice or take risks (Skaalvik & Skaalvik, 2010; Tschannen-Moran & Woolfolk Hoy, 2006). Therefore, it is important to note that teachers’ perceived level of support and self-efficacy was high enough to want to experiment and take risks in their practice. Further, some of the Year 3 and Year 4 novices mentioned how the program encouraged them not only to take risks in the classroom, but also professionally as they began to lead professional development sessions and/or act as leaders in their grade level or department. The following sections highlight how study participants viewed the induction program as helping them take risks in their classrooms and/or as developing teacher leaders.

Year 2. As with the Year 1 teachers, an overwhelming majority of Year 2 participants, via professional development evaluation forms, provided examples of how the program sessions
inspired them to change their practice and implement new ideas. While there were not as many mentions about risk-taking in Year 2 as there were in Year 3 or Year 4, in the Year 2 survey, six out of the 7 responses indicated that their confidence had grown and that the program helped provide a support system that positively influenced their self-efficacy and instruction. One participant stated, “[Self-efficacy] has grown a lot for me. I am more willing to take risks now and I feel as though I am more comfortable in my own teaching skin now that I have some experience.”

In the Year 2 focus group, Anna, a middle school Spanish teacher stated, “We all faced similar issues. It was a place that we could feel vulnerable and not feel judged because we were facing similar things whether it was, ‘I think that this is a discipline issue. What can we do? What options are available?’” She then described that the induction sessions did not just offer one solution, but a variety of options to try out without the fear of administration not understanding if a strategy did not work. When reviewing the data, it became apparent that Year 2 teachers were trying new things and felt comfortable with experimenting, but this change, unlike Anna’s example, might not always be attributed to the program itself, but rather gathering more confidence from experience. It is also important to note that the interviewed teachers were only in the fall of their second year and might not yet have had enough professional development about implementing new strategies to make a difference in their willingness to try new practices.

*Year 3.* The Year 3 and Year 4 teachers were able to provide clearer examples of how the program encouraged them to experiment and take risks, probably because the later years of the program ask them to conduct action research and lead professional development sessions. As with the Year 1 and Year 2 teachers, the majority of Year 3 professional development evaluation form responses indicated that participants believed the program inspired them to try something
new and make positive changes in their practice. One teacher reported that, “It gets us talking, questioning, researching, and implementing new and innovative ideas.” In the Year 3 survey, teachers indicated that they appreciated the district’s commitment to helping teachers explore new instructional techniques. One stated, “It was nice trying out what was asked of us in our classroom because it really changed up the momentum of things. It was great doing activities that were different and knowing that we are allowed to” while another said, “These sessions made me generally more comfortable taking risks in my classroom-as a young teacher, there is a pressure to teach exactly to the book and make sure students hit objectives, but these encouraged me to think outside of the box to benefit my students!” Additional comments were, “I feel that this kind of experimentation is encouraged in this district and it would not be a problem if a subject were put on hold for a day so that I could try out what I had learned” and “I learned so many things that I wouldn't have known about or tried if it weren't for the Year 2 meetings. The environment was always supportive and encouraged us to try new things!”.

One particular comment stood out because the teacher disclosed how the sessions also helped overcome the fear of the unknown:

> These topics helped to open my eyes to educational approaches/methods that I was previously unfamiliar with, or strategies that I rarely self-reflect on. The two sessions that I feel helped me the most were our work with educational technology and mindfulness. Technology has been something I stayed away from my first year or two because I was, frankly, scared to use it because I didn't know how. Now, I have infused technology into my daily lessons, and the payoff is huge! I am so proud of how my students are working with the tech to enhance their learning. We use Google Classroom to submit our work, and it's also a place where I can post resources for our studies. I have recently experimented with voice recordings as a way to share our writing, and the students could not have been more excited. It was a simple change that, once I got over my fear, has reaped better than imagined results.

Through the sessions, the novices not only felt they were granted professional autonomy to make decisions about how to execute best practices in their classrooms, but that they were provided enough support to feel comfortable challenging both themselves and their students. These statements assured me that our teachers felt confident enough to take risks and that the district
leadership had successfully communicated that we want to develop innovative teachers who are unafraid to try new things.

The Year 3 focus groups provided similar feedback. Sam, a high school business teacher, asserted:

The idea of being given space to actually try is really helpful just from my own experience. I know not every institution is set up the way student or teachers are allowed to experiment with strategies that work for them.... Having a safe place where you're able to try that and fail at it, because failing will help you get much better at doing it than succeeding, is really helpful to be reassured that it's okay to try these things and not just stick to what's comfortable.

Once again, teachers mentioned having a “safe space” and being challenged to move beyond their everyday instructional strategies. Kelsey, an elementary teacher, echoed Sam’s sentiments, “I think it just sends the message that you can kind of take risks here, that you feel supported to try new things. Just give it a try and not be perfect, and talk about it. I think that that's huge because when you're coming in and you feel like you have to do something the right way or a certain way, just having those kinds of meetings encourages risk taking.” Lizzie, her colleague, also shared how the program helped her become confident both inside and outside the classroom:

In your first year, you're just fumbling about. I feel like I don't even remember, like I blacked out through half of it. Your second year, you still are questioning moments. I think those [induction] meetings kind of made you feel like I know something that maybe someone else doesn't. I'm confident. I'm allowed to assert myself in a meeting and say we should be trying this. I'm allowed to tell others about this. It kind of gave us that confidence and, like you said, to take risks and to try something new. As people who, you know, in your first year, are just trying to get by, it kind of just gave you those tools to move forward.

These findings indicate that the Year 2 program cultivated a culture where experimentation is encouraged and that teachers feel supported enough to take risks in their instruction.

Lizzie’s comment also highlights another way in which the induction program may support risk taking, by stepping into teacher leadership roles. This may be possible because these teachers are in the program for enough time to begin thinking about how to share the
various strategies they’re researching and implementing with their colleagues. Kelsey, an elementary focus group member, discussed how her confidence has grown to a point where she wanted to also help others, “In the first and second year I would ask for a lot more. This year, I feel like I’m giving a lot more. I’m able to find things that I thought were great for me, that worked out well. I’m sharing [resources from the induction sessions] and actually seeing other teachers use it. It makes me a little more confident in what I’m doing.” By taking a risk and sharing induction resources with her peers (and actually seeing others trust her advice), this teacher’s perceived level of self-efficacy increased.

This theme of teacher leadership continued in the Year 3 survey. One teacher remarked, “I feel the Year 2 Induction Program fully prepared me to be successful. My confidence grew and I feel like I am at a place in my career where I can, and greatly yearn, to be a mentor for newer teachers. Teachers never stop learning, as the profession is ever-evolving, and I am excited to grow with it.” Though this teacher did not have a lot of experience, he/she was confident enough to want to mentor others and become a teacher leader at his/her school.

In short, as the program progressed, teachers wanted to “experiment” outside of the classroom by reaching out and sharing their knowledge with others even though they were only Year 3 teachers. This willingness to lead demonstrates that novices had positive emotional/psychological arousal and feelings of self-efficacy about their practice. The Year 4 program has a built in teachers turn-key element based on their Year 3 action research projects which fosters teacher leadership (Leithwood, 1990). However, I did not anticipate that some Year 3 teachers would already be eager to share the knowledge and skills gained during their induction program experiences and model taking risks to their colleagues by sharing their practice and resources with others.
Year 4. The Year 4 teachers, like the Year 3 participants, believed that the program positively influenced their instruction and self-efficacy as well as increased their willingness to take risks in the classroom. One teacher, via a professional development evaluation form disclosed, “I am more confident teaching and sharing strategies I've been researching in a content area I was not always passionate about.” In the Year 4 survey, one teacher stated, “My research project forced me to come up with some new methods to use in my classroom. Some worked. Some didn't. But it was good to try new things.” Another also felt the Year 3 program promoted growth, “The project forced me to experiment in ways that I probably would not have done without the requirement of the project. In the process I learned a new method that I will use this year.” A third acknowledged, “While the research project did add to my plate, it provided an experience to learn and grow as an educator, as well as feel confident as a teacher leader. Had it not been for this project, I don't think I would have tried this new concept and idea.” Even one teacher who would have benefitted from pursuing a different action research topic recognized how the project increased his/her confidence, “I wish I worked on a topic that would be more useful to me this year and moving forward, but the experience has given me the confidence to try new things on my own and through reaching out to administration for assistance.” These responses connect to research studies that show that once a teacher tries something new and is successful or receives helpful constructive feedback, his/her emotional and psychological arousal increase the level of self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2006; Woolfolk Hoy & Burke–Spero, 2005).

The Year 4 focus group findings align with the survey data. Dave, a middle school Math teacher, stated, “[My action research project] forced me to try- mine was based [on] effective ways to evaluate homework, and I gathered strategies. I learned that what I was doing wasn't the
worst. I learned that there were other ideas that were comparable, some better, some worse. But it forced me to try different methods and get out of my comfort zone a little bit. So, I learned from that.” This theme of growing confidence from being pushed to innovate (in a supportive environment) is found particularly throughout the Year 3 and Year 4 data. Further, like the Year 3 teachers, the Year 4 professional development forms, survey, and focus group data illustrate how the program is developing teacher leaders.

On the January professional development evaluation form, one Year 4 teacher wrote, “I feel confident enough to present to my peers and feel as though it will be informative and helpful,” while another stated, “I feel more confident in my own abilities and also am more comfortable sharing resources with my colleagues.” A third even stated, “Leading professional development sessions and information sessions [around my Year 3 action research project] for parents has been such a highlight in my career!” Two Year 4 survey responses echo these sentiments. The first teacher shared, “The Year 3 program helped me try new things as an educator and gave me the confidence to share those findings with my coworkers” while another stated, “This project not only enhanced my instruction, but also helped me to take on leadership roles. Overall, I'm grateful for the experience!” As with other novices mentioned earlier, these teachers believed both their instruction and willingness to take risks were positively impacted because they now felt confident enough to be teacher leaders, one of the Robbinsville New Teacher Induction program’s goals.

In the focus group discussion, Melanie, an elementary teacher, explained how the program encouraged sharing ideas since she wanted to spread the excitement from her own experiences:

I think also, [the induction program] made me want to kind of share with other teachers,
like I know people, they don't like Socratic Seminars, but like, this is what I did and this is why I do great- or like, they've never tried one. I'm like, oh, well this is what you could do. So I know that it made me want to kind of share that with other teachers because I know that it definitely helped my group.

Jen, another elementary teacher, used the opportunity to become a more formal teacher leader even though she was at first worried by the additional responsibility of an action research project:

My project was about the new science standards and I, again, like Melanie, I was kind of like, oh my gosh, we have another thing, and it's like, this is too much. But what actually came out of it was, I got to now take on something that I've always wanted to do, being a teacher leader, and kind of running workshops and, and getting, kind of having a place where I could be like, okay, now I can. I have what I want to do in the classroom, but I can also help teachers out, which is something I've wanted to get my feet into if that makes sense. I've been willing to dip my toe into the water, you know for a while, so it kind of opened new doors professionally for me, which I thought was kind of cool. And I didn't expect it to.

Jen’s reservations about taking on action research but then ultimately being pleased with the results were echoed by all six members of the Year 4 focus group. She was particularly pleased with the outcome of the project since it allowed her to become more involved in her school’s community and be seen as a leader by both her veteran and novice peers.

In short, though the multi-year program gives them additional responsibilities and requires them to attend more professional development than a traditional one-year program would, teachers believed that the four-year sequence promoted risk-taking and experimentation that led to positive feelings of self-efficacy. The risk-taking and experimentation was facilitated by an environment that offered opportunities for reflection and non-evaluative feedback even if they “failed” when implementing something new. When discussing the Year 2 meetings, teachers shared that they felt “encouraged” and “challenged” to implement innovative ideas and that they would not have tried as many techniques and strategies if they did not participate in the program since they felt they had a safe space to fail. This thinking continued in Year 3 and Year
4, but the data also indicated that teachers felt the third year’s focus upon a particular area of instruction (their chosen action research project) encouraged them to begin taking risks outside their classroom as they were eager to share their acquired knowledge with their colleagues. In Year 4, this theme of teacher leadership crystallized since the program’s emphasis of turn-keying their knowledge provided a further avenue to take risks and helped the novices become more formal teacher leaders (Leithwood, 1990). Once again, if the program ended after the first or second year, I cannot be sure that teachers would have taken risks by conducting action research and sharing their newly acquired expertise with their peers or how this lack of additional experimentation might have impacted their instruction and perceived levels of self-efficacy.

Please see the table below for a summary of how risk-taking and experimentation developed throughout the length of the program.

TABLE 5 Key Findings by Year for Theme #2: Increasing Openness to Risk-Taking and then Sharing the Results

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<th>Openness to Risk-Taking and then Sharing the Results</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tr>
<td><strong>Outcome #1- Willingness to innovate their instructional practices</strong></td>
<td>Induction program encouraged and challenged teachers to implement innovative ideas and to “think outside of the box;” teachers shared that continually having a “safe space to fail” helped them try new things and build their level of confidence as they honed their practice.</td>
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<td><strong>Outcome #2- Willingness to share their instructional practices as a teacher leader</strong></td>
<td></td>
<td>Teachers felt confident enough with the strategies they learned within the program that they began wanting to share acquired knowledge and resources with their colleagues.</td>
<td>Began experimenting with leading professional development for grade level, department, and/or building peers, reported high levels of perceived self-efficacy in their ability to be a leader and contribute to the Robbinsville community.</td>
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Theme #3: Differentiated Foci for Changes in Practice Within Common Developmental Trajectories

In the previous section, I highlighted how the program encouraged the critical outcome of risk-taking and experimentation and how this emphasis might have impacted teachers’ feelings of self-efficacy. Now I will discuss how the program curriculum also helped prompt teachers to embrace different positive changes in practice and how each year of the program added to the novices’ “toolbox of instructional strategies” and aligned with their evolving developmental needs. When conducting data analysis, a change in practice indicated that the teachers had applied something they learned during an induction session to their instruction. Two of the induction program’s main goals are to encourage novices to move beyond worrying about survival and use research-based practices to increase student learning (Fuller & Brown, 1975; Leithwood, 1990). Consequently, the program emphasizes basic instructional strategies in Year 1, more complex ones in Year 2, individualized action research in Year 3, and finally, a turn-keying of action research in Year 4. This differentiated developmental continuum seeks to help novices establish survival skills before being prompted to become more outward-looking, reflective practitioners who are focused upon student learning.

Year 1. In 28 out of 29 November professional development evaluation forms as well as 13 out 15 January responses, Year 1 teachers reported that the induction sessions positively impacted their use of positive language, self-regulation exercises, and/or a specific strategy related to a given problem of practice. One teacher reflected, “One of the [induction session] articles focused on paying attention to the language we use—especially sarcasm. I have made a conscious effort to focus my use of language for the specific level of students” while another shared, “[We discussed how to] make a personal connection to students. I have seen this work
WONDERS with a specific student since the last meeting.” By reviewing the Year 1 professional development evaluation forms, I was able to determine that the majority of the Year 1 teachers were applying what they learned and felt that the sessions positively impacted their practice.

*Year 2.* For Year 2 teachers, I was able to review professional development evaluation forms, their anonymous Google survey, as well as a focus group discussion. For the October meeting about questioning and using student-centered questioning protocols, 16 out of 17 participants cited a change of practice. Some responses included, “During our nonfiction unit, I reviewed open and closed ended questions to help students develop better questions for their piece” and “I changed some of my questioning to be more about the "why" of the problems to get students to think deeper about their responses.” 20 out of 21 participants cited a change of practice inspired by the November Year 2 meeting about Socratic Seminars. Some responses included, “I did a Socratic Seminar with one class. Had them discuss artificial intelligence (their opinions as well as facts) before a writing assignment [to help them process their thinking].”

For the Year 2 survey, teachers reflected upon how Year 1 might have influenced their instruction. As with the Year 1 and Year 2 professional development evaluation forms, teachers indicated that the program positively influenced their instruction. One teacher shared, “I was just thinking the other day how much I have grown as a teacher since coming to Robbinsville. I have completely overhauled my lesson planning to fit the ‘To, With, By’ model and it makes so much sense (and is a great way to ensure I am truly walking my students through the learning process with each lesson).” Another commented, “I had never heard of mindfulness before Robbinsville and I love the idea of ensuring your students are present and focused on the topic at hand. I feel like we often think we have to rush from topic to topic so it was great to learn about taking two to three minutes to pause and redirect the students in a positive way” while a different teacher
stated, “Objective writing benefited instruction so students knew from the beginning of the class what the plan for the day was. It put a stop to the question ‘What are we doing today?’ Students were able to focus and prepare for the tasks of the day.” These teachers discussed induction topics such as structure of lessons, the importance of clear objectives, as well as how to support the whole child, all of which built upon one another and included opportunities to reflect upon how the previous session influenced practice. Depending on the teacher, some sessions might have been more influential and/or met their developmental needs more than others but there were no mentions of a negative impact upon instruction.

In the Year 2 focus group, teachers also felt that their instruction was positively affected. One elementary teacher, Amber, stated:

Actually, the classroom culture day, I remember going in. I had a horrible day with my class and I was like, ‘Seriously? We're going to be talking about this today? Of all days, today is the day?’ We started talking about it and I was like, ‘Ugh, but I can fix this. I can do this. I know what I'm doing now.’ It just helped me have a clearer mindset when I went in the next day to try to fix things because I really do believe the kids, you need to have control over [classroom management]. If you don't, they're not going to absorb anything.

One high school teacher, Addison, found the session about differentiated instruction beneficial:

[I had a] mix of kids who took Spanish in eighth grade. They had the general information. I felt like that was very difficult for me to handle and overcome and plan. Technically, you had kids who had Spanish before, but then you also have kids who have never had it at all. I think just learning different techniques and strategies and doing the hands-on activities and putting that into play was most beneficial for me.

The one session that had mixed sentiments concerned objective writing and the use of “I can” statements. For Michelle, an elementary teacher, it was helpful:

I really enjoyed the session we had on the “I can” statements. From college, I was familiar with objectives, but I had never used “I can” or “we can” in the classroom. I think that it just makes so much sense, especially in elementary school, to be able to give them the focus of the day and that smaller... We're always taught to write objectives so formally, but just that one little statement that gets them focused on what they're going to be focusing on that day, I really enjoyed that session.
For others, like Amber, who was a student teacher in the district, the objective writing session was repetitive. A high school Science teacher, Samantha, said she felt “antsy” during the session but that she still found it helpful to use some of the time to review her objectives for clarity and purpose. Three of the six teachers requested that that specific session be more geared to “content time” where similar content area teachers had time to quickly critique their lesson objectives then spend the remainder of the session co-planning, which is something to consider when planning future sessions. Overall, the teachers stated that they found the five Year 1 induction sessions beneficial to their practice and as Samantha mentioned, “always got something out of them.” The findings indicate that the sessions about basic instructional strategies mostly aligned with the teachers’ needs as they progressed through their first year of teaching. In Chapter 5, I will go into more detail about how the program can incorporate more “survival skills” into the curriculum to better address Year 1 teachers’ developmental concerns (Fuller & Brown, 1975).

Year 3. For the Year 3 professional development forms, only one set of data (from the January session) was reviewed since the Year 3 teachers only met in October, 2016 and January, 2017 and had yet to begin their project in October. In January, 16 out of 16 participants shared how their practice has been positively impacted from the Year 3 action research project. Some responses included, “Researching reflection theory and practices has promoted more use of formal structured reflections and a revamp of overall direct instruction to include more reflection,” “Implementing Socratic Seminar allowed me to reduce amounts of homework and adding positive comments in Genesis [online grade book] help me boost student self-esteem,” “[The project] forced me to focus in on how to make students have more ownership of their learning,” “My research topic has opened my eyes to the importance of including 21st century
skills in my instruction,” and “It [the project] has changed how I feel about homework and how I evaluate students' work at home.” The program’s shift in focus towards individualized action research and away from a more traditional professional development approach encouraged teachers to research a diverse array of topics and apply more sophisticated strategies than they had learned about during their first two years of the program. The teachers’ comments also imply that they were deeply reflecting upon their practice since they had to focus on one particular aspect of their instruction rather than implementing and reflecting upon several strategies (Fuller & Brown, 1975).

In the Year 3 survey, teachers reflected upon how the Year 2 program might have influenced their instruction. Some responses included, “These sessions gave me concrete strategies that I can use in the classroom. Self-reflecting helped me to think about areas on which I can focus on improving this year,” “These are now instructional tools that are added to my ‘tool box.’ It has helped me take risks and try new best practices as a teacher,” and “I learned to listen to the kinds of questions my students ask, which helps me to guide them to ask higher level questions. I also learned simple ways to incorporate technology into my lessons that excite and inspire my students.” Different teachers discussed questioning, incorporating mindfulness, Socratic Seminars, and implementing educational technology.

As stated previously, depending on the teacher, some sessions might have been more influential than others, but these meetings connected to one another and helped teachers reflect upon how they implemented a variety of strategies regardless. Further, they were appropriate in terms of pushing teachers along the developmental trajectory since they asked novices to implement and reflect upon strategies that went beyond the “task” of teaching. In this second year, teachers had to begin thinking about how their instruction impacted student learning
(Conway & Clark, 2003; Fuller & Brown, 1975). There were no responses about how the program negatively impacted instruction or if some sessions were not as helpful as others.

As for the Year 3 focus groups (one primary and one secondary), teachers once again indicated that the program caused a positive change in their practice. Clara, a high school pull-out Special Education teacher commented:

I feel like it [the induction program] also opened up my mind to new possibilities but also made me excited because I was getting different ideas based off of what we learned and say. ‘Okay, this is a great idea,’ the Socratic Seminar. Then that gave me a couple other different ideas of different discussion techniques and getting the group to really work on talking with one and other. The technology piece, I found that to be really beneficial and it's really helping me reach my students in different ways and giving them some different other opportunities to learn and use technology.

Lizzie, an elementary school teacher, also discussed the power of Socratic Seminars and how to incorporate student voice in the classroom:

I remember last year, in the second year meeting, you bringing it up and I remember distinctly saying… ‘Um, are you going to come and support me when this one's up?’ Then I did it and I loved it. I ended up doing it a lot throughout the year and now it's a standard procedure in the room afterwards I felt like, ‘Why hadn't I been doing this all along? Why haven't I been giving the students the power?’ I think through Socratic Seminar specifically, it kind of made me realize that they're capable of so much more than sometimes we give them credit for. It made me let go, as someone who can be a little tied down. Being able to say, these kids are going to work out and they're going to be fine. They're going to discuss it. I felt like that exercise, even though it was one specific lesson model, kind of opened my eyes to how much further I could be pushing my students in so many different areas and the way I can treat them as learners. I think that was a really, really awesome experience specifically. It affected my instruction a lot and other areas as well.

Sarah, another elementary school teacher, focused upon the questioning session:

I think that that professional development kind of changed the tone of my classroom, with the type of questions my students are asking. I was noticing that my students were asking very closed questions and kept asking the same questions over and over again. We talked about different kinds of questions and we use it all the time. I realized that questioning is important, across all subject areas, and how students should always, always, always be questioning. That became a shift in our environment, to make it more of a questioning classroom.
Reagan, her colleague, found the focus upon incorporating mindfulness to be the most helpful, “Just learning how to be mindful. That was one of the things that I think changed me as a teacher. You know, seeing even Kathie [a New Teacher Induction facilitator and administrator] do it with us; get us set and really hone in on us as people, our lives at home, and who we are. Doing that with my students every day made me grow and made my teaching grow. Made them better learners and us better learners.” Unlike the Year 2 teachers, none of the Year 3 teachers specifically mentioned a session not being as helpful or influential upon their instruction. However, the Year 3 secondary teachers also requested more time to work in content area teams to discuss how to implement these research-based strategies.

*Year 4.* Like the Year 3 professional development evaluation forms, only one set of Year 4 data (from the January session) was reviewed since the Year 4 teachers only met in September, 2016 and January, 2017 and had yet to begin their project in September. In January, 6 out of 7 participants indicated that the Year 4 turn-key project positively impacted their practice. Some of their responses included, “It helped me learn new ways to encourage student participation/confidence; it helped me grow in a specific field [facilitating professional development],” and “It made me more aware of how my students' perceive my feedback/comments and focus how to best phrase questions to enhance the student learning experience.” The Year 4 project is unique since it asks teachers to share their action research with an outside audience (their departments, grade levels, Parent Teacher Associations, district colleagues, etc.) while still continuing to implement a research-based practice in their classrooms. Teachers remarked that they felt they became “experts” in a specific area because of the Year 3 and Year 4 induction program and that Year 4 of the program naturally built upon Year 3. In a one-legged interview, a teacher shared that it “made sense” that she was asked to
turn-key all the knowledge she had acquired throughout the Year 3 project during Year 4, stating, “I have a lot to share.”

In the Year 4 survey, teachers reflected upon the Year 3 action research project and its influence upon their instruction. The teachers shared, “I have found so many different opportunities to insert my project into our daily activities. I have also communicated with parents about how I am infusing my project idea into our day and ways they can help their children at home,” “My project helped me to feel more confident in both implementing new teaching strategies across the curriculum and sharing what I've learned with others,” and “I feel that my action research topic has added more depth to my instruction overall. I try to implement my research throughout my day as much as possible.” One particular reflection stood out since it discussed how the project pushed the teacher to think outside the box and implement instructional strategies he/she might not have otherwise utilized:

The Year 3 action research project opened my eyes to the variety of levels of student participation in the classroom. Also, it helped me to develop methods of encouraging participation and developing an environment where students want to try their best out loud. This project helped me come across methods to achieve this goal, which I may not have come across otherwise. It helped not just me, but the students to become successful with participation, as well as overcoming any obstacles they may feel when participating. Additionally, the project helped me become knowledgeable in a method I wasn't too familiar with.

One teacher commented how the action research process was not always easy or researched strategies might not work but that overall, it was a worthwhile process, “My research project forced me to come up with some new methods to use in my classroom. Some worked. Some didn't. But it was good to try new things. The project forced me to experiment in ways that I probably would not have done without the requirement of the project. In the process I learned a new method that I will use this year.” Other teachers agreed, all six survey responses discussed the positive impacts the project had upon instruction.
In the Year 4 focus group, teachers revealed that they continue to implement the strategies they learned during the Year 3 action research project. Chloe, a middle school math teacher who studied growth mindset, commented:

It [the project] definitely made me more passionate about not only how to use it in my classroom, the growth mindset aspect of it, but I've continued to research it, and I've continued to find different TED Talks and all these things that I can use. You know, how else can I use this, or what other ways can I inspire the kids, not only to use it in math, but just like, as a person.

Melanie, an elementary teacher who also researched growth mindset, stated, “I'm reading another book now for my classroom, I think about how I can use growth mindset- or even just different lessons and stuff like that. So I think it motivated me and it gave me like, kind of what Jen said, gave me something to be like, really passionate about as part of my classroom.” Jen, the elementary school teacher Melanie mentioned, said:

I think it [Year 3] made me more passionate. I was not a science person at all, and now, somehow I became this kind of science [expert] and I want to think of new ways to implement it. I've been going to workshops outside of work to further my understanding of the standards. People who know me prior, know I'm completely reading and writing. So to now have this new interest, definitely surprised me, and it's definitely something that's going to stick with me for a while.

The program not only positively changed Jen’s practice, but challenged her to learn and become interested about something outside her comfort zone. All three of these teachers also stated that their project made them more “passionate” about a content area, instructional model, or concept that they felt had not just impacted their practice in Years 3 and 4, but for years to come. The Year 4 focus group teachers also unanimously shared that though the project was as Dave, a middle school math teacher said, “a lot of work,” they like he, were glad they were “forced to do it” since otherwise they might not have ever gotten the opportunity to research something they were passionate about and implement innovative techniques in their classrooms. All six believed their projects improved their instruction. The action research project, as it was intended, brought
about positive changes in practice (McNiff, 2013). In Years 1 and 2, teachers were taught explicit research-based strategies and in Year 3 they had the support of a structured action research protocol and administrator mentor to help them positively change their practice. However, by Year 4, teachers had become so enthusiastic about a given technique, strategy, or model, they were seeking additional resources and information on their own to further hone their instruction. In a sense, teachers were gradually released to determine their own professional development to directly impact student learning, which evokes Fuller and Brown’s (1975) Stages of Concern model.

In summary, is important to note that changes in instruction that could be directly tied to induction program activities occurred across all four years; the teachers did not stop honing their practice after Year 1. Instead, as each year of the program introduced more sophisticated instructional strategies, teachers were consistently challenged to reflect upon their practice and try new techniques that they then added to their repertoire. As a result, teachers noted explicit changes in their instruction after each year of the program and as their needs evolved away from their own “survival” to impacting student learning, so did the program (Fuller & Brown, 1975). Jen, an elementary school teacher, spoke about the overall program and how the strategies learned over four years have impacted her instruction. “I think that over the past four years, we've received so many professional development strategies that I can now apply to different subjects. So, even if I learn it for workshop, it's like, oh, I can also see that working in Social Studies. So, even if the curriculum itself changes, I still have that backup strategy that I can go to kind of tailor it to whatever is that I want to teach.” Jen, as well as other study participants, cited that program has provided them with a “toolbox” of strategies that encourage them to enhance their instruction. If the program had only lasted one year, teachers would not have received as
many strategies and resources to improve their practice. Further, beyond simply the number of instructional strategies, this toolbox came to include more sophisticated techniques such as student-centered questioning and discussion as the more experienced teachers transitioned through Fuller and Brown’s (1975) Stages of Concern and were ready to focus upon student learning rather than their own survival. Please see the table below for a summary of how each year brought about perceived changes in instruction.

**TABLE 6 Key Findings by Year for Theme #3: Differentiated Foci for Changes in Practice Within Common Developmental Trajectories**

<table>
<thead>
<tr>
<th>Differentiated foci for changes in practice</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teachers applied the strategies learned during the Induction sessions, focused on more basic areas such as classroom culture and objective writing that (mostly) aligned with their needs as a Year 1 teacher.</td>
<td>Teachers applied more complex, research-based strategies that tie directly to student-centered learning such as Socratic Seminars, World Cafés, and student-centered questioning protocols that (mostly) aligned with their needs as a Year 2 teacher.</td>
<td>Teachers chose one research-based strategy, technique, or instructional model, conducted action research with the support of an administrator mentor over the course of the school year and reflected how to best use their research to improve their instruction. Teachers were able to choose a topic that aligned to their needs.</td>
<td>Teachers (on their own) continued to implement strategies learned during their action research project and spoke of how they were inspired to deepen their research about their chosen topic and share their knowledge with their peers.</td>
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*Table 6. Key Findings by Year for Theme #3; Adapted from Fitzpatrick, Sanders, & Worthen (2011).*

**Incorporating more teacher choice in professional development.** It is important to note that teachers also had suggestions on how to improve the program’s multi-year curriculum.
When looking across the data, I also noticed that teachers sought professional development that was more differentiated to their content areas and/or current problems of practice. Specifically, teachers wanted input in identifying professional development topics and sessions they thought were necessary to their self-efficacy and practice. Even though teachers were not done learning after Years 1, 2, or even 3, they still sought more input into the program curriculum. This finding is important because the teachers believe if they had more of a say in program curriculum, their perceived levels of self-efficacy and practice would be further improved.

**Year 2.** The Year 2 participants were particularly passionate about teacher choice and had several suggestions for incorporating more differentiation into the program. Amber, an elementary school teacher recommended,

> I think it would be cool if you could give the first year teachers umbrella topics...then you could have them choose which ones they think are going to be the most beneficial. Then, narrow it down from what people are saying and then those would be the ones you focus on. Then hopefully, the majority of the meetings that you’re having are ones that everyone has chosen and will find to be beneficial.

A professional development evaluation form from November comment echoed Amber’s request, “I wish it [the program] was more differentiated. We are all coming from different backgrounds and experience, so it'd be nice if the meetings met everyone's needs.” One of those needs, at least for Year 2 grade 6-12 teachers, was content area support. Though there was not an overwhelming request for content area professional development, in each Year 2 data source at least two teachers asked for more content area-focused meetings so that they could apply more specific content-area pedagogy to their practice. The main goals of the induction program are to orient novices to Robbinsville culture and to provide helpful instructional strategies; we tend to rely on the observation process and department meetings to provide content area support. However, it is possible to include more collaboration amongst novices in the same content area
so they can receive additional time to co-plan and receive feedback so that they feel more competent and efficacious.

Further, teachers asked for more of a focus upon what I’m deeming “problems of practice” where they could discuss and receive feedback on how to handle current issues in their classrooms. Hannah, a high school Science teacher suggested, “If we maybe start the beginning of a meeting with what are some trends going on in our classrooms...we could break off into groups about different trends that we needed help with.” Samantha, her high school colleague, agreed, “It’d be nice to to be like, ‘Oh, I have this student who’s specifically tough for me. What can I do to make this student successful?’ It’s being able to talk it out with somebody or even bringing a sample quiz or test of yours or a lesson plan.” These teachers sought professional development that was relevant to their immediate needs rather than strategies that could eventually improve their practice (Fry, 2010; Fuller & Brown, 1975; Wong, 2004). Because of this feedback, in the spring of 2017, the other induction facilitator and I incorporated a problem of practice focused induction session for both Year 1 and Year 2 teachers. In these meetings, teachers completed a protocol that encouraged them to share a current classroom issue, answer questions and receive feedback from their peers, reflect upon their problem, and brainstorm possible solutions. It is my hope that these meetings will further improve instruction and increase self-efficacy since teachers had a chance to reflect upon their practice and receive helpful feedback about how to best move forward.

Finally, the Year 2 teachers asked for clearer guidelines and support in regards to building relationships with parents. If teachers had more input into the program’s curriculum, parents would have been one of the session topics. Hannah disclosed, “Something I wished we had talked about more was...support with parents. [It] was something that I felt like I didn’t
really know how to deal with. It wasn’t just communication with parents, but knowing that if a parent questioned you, the hierarchy of how to deal with parents.” Hannah and another high school colleague felt somewhat battered by constant parent emails demanding explanations for grades and feared that administration would not support them if they were not able to successfully address parent concerns. Ashley, a middle school teacher, agreed with her high school counterparts and suggested that the induction program incorporate a session about parents and include scenarios that teachers could review in order to learn strategies and reflect upon their own practice. This suggestion is also something to be considered when planning for the 2017-2018 school year since novices’ self-efficacy may dwindle if they do not feel they can advocate for themselves (Tschannen-Moran & Woolfolk Hoy, 2006).

**Year 3.** Like Year 2, Year 3 teachers also stated that they would like more teacher choice and support with their content areas and building parent relationships. Unlike Year 2, they did not mention more discussion of “problems of practice” because their Year 3 action research project concentrates on identifying unique needs in their classroom and discerning a multitude of techniques to address these needs. Their “problems of practice” are embedded into the Year 3 curriculum.

In regards to teacher choice, one professional development evaluation form comment asked for, “A program that was differentiated toward people's prior experience,” which could mean when designing sessions, considering the teachers’ various preparation programs, field placements, and/or prior teaching experience since some of our “novices” have taught in other districts before Robbinsville (none of these more experienced teachers were included in this study). Another comment, similar to the Year 2 feedback, stated, “Have teachers ask for specific areas of need to discuss at meetings.” The program does ask teachers about these specific areas
of need but because of time constraints and the unique needs of some teachers, not all topics can be addressed.

Sam, a high school Business teacher, also suggested that the program sometimes, “Allow teachers the time to innovate and come up with their own ideas and relate their teaching style to their students learning style, kind of coming up with strategies that way opposed to, ‘Here’s a strategy, implement it.’” This recommendation of including a more inquiry-based session could balance the more instructional sessions and might encourage higher levels of self-efficacy since this approach affirms teachers’ knowledge of their craft and learners (Tschannen-Moran & Woolfolk Hoy, 2006).

Content area support was also a need for our Year 3 teachers. In the professional development evaluation forms and survey, teachers asked for more time to review curriculum, collaborate with content area peers, and learn instructional techniques specific to their content area. In the Year 2 data, only secondary teachers requested additional content area support. However, Year 3 elementary teachers also asked for assistance with interpreting newly updated curricula. One teacher asked for time to just read through the curricula with colleagues so that she knew she was on the “right track.” A few others wanted to attend sessions around Math and Science since they felt they were not as knowledgeable or confident in these areas and wanted to ensure they were using appropriate strategies to relay content to students.

Lastly, Year 3 teachers also requested more professional development concerning parent relationships in their Year 3 survey and focus group. Though they felt more confident in Year 3 than than in Years 1 and 2 in how they handled parent communication and concerns, novices like Lizzie, an elementary teacher, recommended, “[Adding] something with parents. I feel like that was what I was most petrified about. You know, especially my first two years. Maybe
some guidance or conversation about what to do with challenging parents.” Lisa, another elementary school teacher, suggested that the program have, “a forum with parents who are already open or involved with the school. Just so that we also build that connection more and [no longer think] they’re scary people out to get us type thing. That way we can build that relationship with them.” Survey results also indicated that other Year 3 teachers wanted the program to include more about “involving parents.” As mentioned previously, this suggestion to help novices improve the home-school connection will be considered for the 2017-2018 induction sessions since its inclusion will help novices’ learn how to advocate for themselves (which promotes self-efficacy) and cultivate these important relationships (Tschannen-Moran & Woolfolk Hoy, 2006).

Year 4. As with Year 2 and Year 3, Year 4 participants shared how much they enjoyed having choice in their professional development. In the Year 4 survey, when reflecting upon having choice during the Year 3 project, one teacher wrote, “I think having us choose a topic of interest/application to ourselves is the best idea. I think that is much better than choosing one for us.” Both Year 3 and Year 4 teachers made comments in focus groups about how they favored Year 3 and Year 4 since these sessions were tailored to teachers’ individual action research projects. In fact, two of the six Year 4 survey respondents did not just seek more choice within the induction program, but also with district professional development. One stated, “I would love another EdCamp [teacher choice] style professional development! Having a choice to attend the workshop that I feel will best support me as an educator was invaluable.” I believe the district is working towards including more teacher choice in our four district professional development days each year and that our Year 3 and Year 4 New Teacher program are naturally differentiated...
to teachers’ needs. However, it is still important to consider how to incorporate more teacher input and choice within Years 1 and 2 of the program.

In their survey, two of the Year 4 teachers also noted that they would like to participate in additional content-area focused professional development, but this topic was not as prevalent as it was with Year 2 and Year 3 teachers. Year 4 teachers did not mention content area support in their focus group or professional development evaluation forms, but the two out of the six survey participants did ask for time to work with colleagues and “content specialized professional development.”

Finally, Year 4 teachers recommended that the Year 1 program include more sessions around parent communication and relationships. Melanie, an elementary teacher, reflected upon her own difficulties with overly involved parents during her first year of teaching and suggested, “Some confidence to communicate with families, I think would help, because I think that’s something that college can’t prepare you for.” Dave, a middle school math teacher, like his Year 2 colleagues, asked for scenarios of how to handle a parent conversation or possibly some role-playing. Three of his colleagues nodded their heads vigorously to show their support of his suggestion. The Year 4 teachers did mention that over time, experience allowed them to increase their levels of self-efficacy and feel more comfortable engaging with challenging parents. However, they also advocated for an induction program that was more intentional in providing strategies and resources about building partnerships with parents. These suggestions should be considered; if teachers feel they have more input and choice in their professional development over the course of the four-year program, they might be even more likely to experiment, take risks, and employ changes in their instruction that make them feel more efficacious and competent. Regardless of these suggestions, the teachers believed that each year of the program
was mainly aligned to their evolving needs and that the multi-year program helped them develop into efficacious and competent practitioners.

**Theme #4: Crossing Wider and Wider Divides: Building Relationships across Cohort Members, Veteran Colleagues, and Administrators**

Another theme that emerged was that novices valued the relationships they developed with their peers, veteran colleagues, and administrators over the course of the induction program. When they first begin teaching, novices tend to feel isolated, that they can never be as effective as their veteran colleagues, and that administrators’ sole goal is to evaluate rather than support them (Fry, 2010; Lortie, 1975). Therefore, it is important to describe how the Robbinsville Induction program was able to help novices “cross the divide” and provide a venue for new hires to build relationships with and receive verbal persuasion (feedback) from fellow novices, veteran teachers, and administrators.

Verbal persuasion is a key component of self-efficacy because novices are influenced by the amount of feedback they receive about their instruction from parents, colleagues, and/or administrators. Those who receive consistent positive and/or constructive feedback rather than harsh evaluations with no follow-up support are more likely to feel efficacious. At the beginning of the program, teachers relied mainly on their assigned mentors for guidance and verbal persuasion, but as the program continued, they began to rely upon members of their induction cohort for ideas and support as well as build stronger relationships with their building administrators and/or content area supervisors. These different sources of feedback encouraged novices to reflect upon and enhance their instruction. Further, the relationships helped novices feel emotionally supported and more efficacious as they received constructive criticism and encouragement. In the following sections I will highlight how novices’ self-efficacy and
instruction were positively impacted by the program’s focus upon developing connections with cohort members, veteran colleagues, and administrators. Within each section I will also discuss how the novices felt these relationships could be further strengthened and improved.

**Novice relationships—a sense of togetherness and connection.** When Robbinsville initially created a multi-year cohort model, it aimed to help facilitate relationships between staff members who share the same highs and lows of being a novice teacher. Throughout the data, it was apparent that teachers welcomed participating in induction as part of a cohort where they could develop relationships over the course of four years with colleagues in different grade levels, departments, and/or buildings. Regardless of these differences in placement, novices felt that they had developed a sense of togetherness and connection with their peers that they might not have if they only attended a one-year induction program. The following passage features Year 2, Year 3, and Year 4 teachers discussing how the multi-year model helped cultivate relationships that positively impacted their instruction and perceived level of self-efficacy.

**Year 2.** In the Year 2 survey, teachers commented how attending the sessions as a cohort of novices helped develop a sense of community. Specifically hearing about how others were feeling promoted an increased level of comfort and connection. One teacher stated, “Meeting as a group and hearing everybody's feelings helped me feel more comfortable with those topics.” Hearing from other novices about their fears or concerns helped this specific teacher become open to ideas presented during the professional development sessions and become more willing to apply what he/she learned in the classroom.

Besides having others to feel comfortable sharing successes and failures with, the program also helped create a support group in a period of uncertainty, the tenure process. A high school teacher divulged, “Obviously, the tenure process is a stressful one, not knowing if you're
going to get rehired, not going to get rehired. I think it's having an emotional support group to go to and have somebody there always supporting you and always showing you that.” This emotional connection helped teachers feel less isolated (Fry, 2010; Lortie, 1975) and encouraged them to form connections with those whom they might not regularly see or collaborate. Hannah, a high school Science teacher, shared:

It's the support that we have of each other to go to these [Year 2] meetings now. It's a cool experience because then these people that were total strangers last year you see how much you've connected with. Going to the second year meetings, the people that are at those meetings are the closest people I'm with at the school. It's cool to see those relationships form because it's so important to feel the support to have those real relationships. I feel like those meetings just foster that time that I can see Addison when we're at total opposite ends of the hallway and teach totally opposite subjects. We can sit there and just talk about our experiences and even help each other even though we teach different things. It allows us to have that time to communicate with others.

The cohort model helped facilitate emotional and professional networks amongst the novice Year 2 teachers so that they could use one another to feel less isolated and comfortable with their practice. There were no specific mentions about how these relationships impacted instruction; during Year 1, these teachers were more interested in connecting with their peers and helping one another as they progressed through their first year in the profession.

**Year 3.** The Year 3 teachers regarded the cohort model as one of the reasons they felt more efficacious and willing to reflect upon their instruction. In the Year 3 survey, one teacher wrote, “It's really great to have a cohort of teachers who I started on this journey and meet and engage in these sessions. It's easy to feel alone in this profession when the stress and work seems never-ending. However, the teachers in my year provide that support as we navigate the challenges.” Like the Year 2 teachers, the Year 3 participants acknowledged the aura of loneliness and isolation that surrounds the profession (Lortie, 1975) and how developing relationships with others in the same situation made them feel more efficacious. The support of the cohort also positively impacted instruction. One survey participant pointed out, “We are a
strong cohort and we feel strong together. With us being together we can discuss and change. We don't get stuck in bad routines. We get to listen to others’ ideas before we find what fits!” This openness to others’ feedback, or verbal persuasion, helped teachers hone their practice.

In the Year 3 focus groups, teachers reiterated the same ideas as the survey respondents, focusing upon how the cohort helped reduce feelings of isolation, form connections across content areas, grade levels, and buildings, and enhance instruction. Sam, a high school Business teacher stated, “I feel like teachers, at least in my case, their largest critic is themselves. I’ve come to observe that, at least for most teachers, not all but most. When that's the case you need to hear from other people, that they've experienced the same things. You're like, ‘Okay, you know what then? I'm not off the path. I'm on the right path.’” Sam noted that feeling like he was on the same “path” as his peers led him to feel more efficacious. Lizzie, an elementary teacher, shared Sam’s sentiments about how the program helped her feel less isolated and feel connected to others:

I like this safe space that you have. I think when you're starting out it's so important to come back to your roots, and remember we're all in this together. We all started together. Beyond all the amazing information that has been given to us, all of the amazing professional development, everything, and how much we've learned, is also that feeling of togetherness. There are days where the school is big, you're running around, and you don't get to go to lunch. On your prep, you're fixing three copiers. You may not see another human, an adult, in a day. It's so nice to know you're going to go somewhere; see humans that you can connect with and level with and gel with. I think it's really important.

Clara, a high school Special Education teacher, explained that for her, spending time with fellow novices was not just about feeling connected, but also her instruction:

[It’s been beneficial] being able to learn from the other teachers and get some ideas from you guys and what has been working well in your classrooms, and be able to hear like from the middle school, what they’re doing, not only getting the ideas and new strategies based off of what you've been teaching us at our meetings, but also then getting some other information from the other teachers and be able to grow off of that and get some other new ideas to take route in our teaching.
Clara did not just rely on the group for a sense of connection, but as a way to attain new strategies and resources to improve her practice. The data implies that the Year 3 participants believed the multi-year cohort model brought about a sense of togetherness and connection that positively impacted both self-efficacy and instruction (Tschannen-Moran & Woolfolk Hoy, 2006).

Year 4. In the Year 4 survey, teachers also indicated that they felt their cohort was a source of encouragement and strength. One teacher wrote, “You become close with the other teachers in your program and develop a special bond. You can relate to struggles and accomplishments, and you really have a support system within them.” Another commented, “You grow with your cohort and learn to rely on each other” and a third shared that they wanted even more time during Years 1 and 2 to collaborate with their peers:

Based on my experience in the first and second years, I could have used more time at meetings to air out issues that I was having with my cohort. Things that I might have been too nervous to share with more experienced teachers, but to hear that others were having some of the same obstacles as me and then get to work them out together would have been very worthwhile.

This feedback about wanting even more time to work with and receive additional feedback from peers about instruction is something to consider when planning future Year 1 and Year 2 professional development sessions.

In the Year 4 focus group, Megan, an elementary teacher, stated that she enjoyed the multi-year cohort because of, “the emotional support of, yeah, we're all in this crazy boat” while Melanie, also elementary, thought it was helpful to, “just know there are so many people going through the same thing that you're going through, whether it's at the middle school, high school, or elementary school….ˮ Chloe, middle school Math, reiterated, “Well, [the program is beneficial because of] being able to have this group of people to always go back to because you
just grow with them, and you form a relationship, and I think that's so special, going through the years.” Besides the emotional support to build self-efficacy, Melanie also mentioned instruction, “We loved, you know, developing relationships with our coworkers, and, you know, it's really helped us become better teachers [when we discuss strategies].”

In short, from the beginning of the program and throughout, teachers perceived the multi-year induction cohort model as a positive influence upon their self-efficacy and instruction since it encouraged togetherness and connection amongst novices in a normally isolating profession (Fry, 2010; Lortie, 1975). As Lizzie, a Year 3 elementary teacher asserted, “To have that community, I think, is so important. I feel like I'm going to miss it eventually, when we're about to leave [the program].” That aura of loneliness does not disappear after the first year of teaching, which is why it is important to help novices continue to build relationships with one another as they progress through each year of the multi-cohort model (Fry, 2010; Guarino et al., 2006; Kardos & Johnson, 2007; Lortie, 1975). In Year 1, novices relied upon one another solely for emotional support, but as they progressed through the program, they began to collaborate with one another and receive feedback that helped them hone their practice and feel as if they were on the “right path.” If the program ended after Year 2, perhaps these relationships would have continued. However, the induction program provided a consistent opportunity for novices to “cross the divide” between grade levels, content areas, and even buildings to form supportive connections and think about their instruction.

**Collegial support and verbal persuasion from veteran colleagues.** Another subtheme was how novices relied upon their veteran peers for advice and feedback, whether these teachers were their assigned mentors or their grade level, department, or building colleagues. When teachers had time to meet with mentors or veteran colleagues, they felt they learned helpful
strategies and their self-confidence improved (Jones et al., 2013; Kardos et al., 2001; Kardos & Johnson, 2007).

**Year 1.** In the Year 1 October professional development evaluation forms, eight out of the twenty-seven teachers mentioned enjoying professional conversations and wanting even more time to discuss strategies with their veteran colleagues. For the Year 1 teachers, they specially asked for additional time with their formal mentors. Some requests included, “More time to meet with my mentor,” and “Hearing different strategies from all experiences.” In the November forms, six out of twenty-nine teachers mentioned appreciating time with their mentors and when asked how the program could continue to support novice development, one participant stated, “Continuing to give us opportunities to discuss different strategies that are effective and collaborate.” Responses like these indicate that novices valued time with their mentors and were applying the latter’s feedback to their instruction. Finally, on the January forms, five out of the fifteen participants asked for more time to work with their mentors. Responses included, “Just having time set aside to discuss issues with [veteran] colleagues and brainstorm was wonderful. A regular basis would be great!”, and “I’d like more time to collaborate with mentors.” Even though the Year 1 teachers felt the time spent with their mentors was worthwhile, many wanted even more opportunities to discuss strategies with their veteran colleagues and gain access to their mentors’ expertise.

**Year 2.** On the Year 2 professional development evaluation forms, teachers also indicated that they could further benefit from professional conversations with their veteran colleagues. About five teachers per session (out of twenty or so) asked for time to collaborate with not just their first year mentor, but with all of their department and/or grade level colleagues. Further, one teacher asked specifically to have a mentor for more than one year. In the Year 2 survey, two
teachers out of the seven also indicated how much they valued their mentor, with comments such as “I had the opportunity to work very closely with my mentor. She was able to provide me with validation and different ideas when obstacles surfaced” and “My mentor continues to guide me through the decision making process and helps me feel more comfortable with the decisions that I make.” These statements indicate that the mentors did not just provide strategies, but acted as a source of support and confidence booster to novice teachers (Guarino et al., 2006; Smith & Ingersoll, 2004; Strong & St. John, 2001; Strong, 2009).

In the Year 2 focus group, teachers continued to value their mentors’ impact upon their instruction and confidence. Samantha, a high school Science teacher shared how her mentor helped changed her entire approach to teaching:

I definitely think though some of the conversations I had with my mentor totally set me in a different direction than where I would've been had I been just by myself. There were so many things I would second-guess myself on. Maybe I didn't second-guess myself in front of the classroom, but I would run to my mentor after and be like, ‘This is what happened. How do I fix it? What do I do about it?’ Those little conversations added up plus some of the bigger ones I feel like changed my whole mindset of how I think and approach the way I teach.

All six of the focus group participants benefitted from their mentoring experience and one secondary teacher commented how she enjoyed having her mentor attend Year 1 meetings with her since it provided an additional “check-in” and promoted discussion about specific strategies. One suggestion was brought up by Amber, an elementary school teacher. She stated though her mentor was extremely valuable, she needed access to more expertise from a variety of experienced teachers:

I had to find strategies on my own to help deal with that whereas if I had someone that I could pick their brain about it. I mean my mentor I did, but you need more than one person. You know what I mean? It's other ideas on how they handle it from experienced teachers, veteran teachers that have been doing this for 20 years. What are some things that you do time management-wise? When do you plan? When do you find this? Trial and error, what works for you? What doesn't work? That would've been really beneficial for me last year.
Though the program does encourage partnerships with (teacher) instructional coaches and master
veteran teachers through coaching cycles and “learning walks,” this idea of building a stronger
bridge between novices and veterans (beyond formal mentoring) to share resources, ideas, and
support is a theme that appeared throughout the data.

Year 3. In the Year 3 survey, one teacher mentioned how collaborating with both novices
and veterans provided clarity, “It's helpful to be able to collaborate with colleagues of different
grade levels and content areas, especially those in a different school. This gives a different
perspective than just talking to people I see every day and helps me to see where kids and
expectations are headed.” In the Year 3 secondary focus group, Clara, a high school Special
Education teacher, expressed that she felt her veteran colleagues created a culture of support:

You're not just on your own, if you do have a question that there's people here that you
can talk to and feel comfortable bringing up your concerns, your questions, and you can
have that opportunity to learn from your coworkers and learn from veteran teachers, and
get some of those other insights and ideas of what has been working really well.

In this instance, Clara had begun to refer how she relied on her mentor, but then shifted the
discussion into how her high school veteran colleagues’ input enhanced her craft. Her comment
echoes Amber’s, both novices felt that it was important to have more than one “mentor” and that
veteran colleagues from across their grade level, department, and/or building could also help
them develop their instruction and increase their self-efficacy (Jones et al., 2013; Kardos et al.,

Year 4. In the Year 4 survey, teachers focused upon the feedback their administrator
mentor provided during the Year 3 project. However, during the Year 4 focus group, the teachers
mentioned their experiences with mentors during Year 1. While half of the six teachers found the
mentoring experience to be worthwhile, three of the teachers provided several suggestions of
how to improve this aspect of the program. Chloe, a middle school Math teacher, had a mentor
who went out on maternity leave midway through the year and was never replaced. Jen, an
elementary teacher disclosed she received a mentor who provided mixed messages about the
district’s direction, “For my experience, I was told to work with somebody who didn't
necessarily go along with things that the grade, overall, was doing. So, I was receiving
information from my mentor that didn't go along with what my administrators really wanted me
to do.” Research shows that teachers need a mentor who is collaborative, preferably teaches the
same content and/or grade level, embodies district goals, models best practices, is trained to
worked with novice teachers, and is willing to provide support and resources (Ingersoll &
This research ties to what Dave, a middle school math asserted:

   I think the mentors for those first year people need to be people that are very interested in
   bringing along a new teacher, and willing to put in the significant time and effort that is
   required, especially for the number of people we have coming out of college that are first
   year teachers, to teaching…so, and if it means having less mentors and they work two on
   one instead of one on one, but they're more interested and they're more willing to put that
time and effort in, I think that's what it needs to be. I think that far too often, mentors
don't really want to put the time and effort. I also think mentors need to be better
prepared, if- well, I know this kind of contradicts that, but as much as possible, grade
level or subject, as much as possible, because I know sometimes they're not matched
by grade or by subject. I think that's a huge thing that we need to do for our first year
teachers.

It should be noted that in the time since these teachers were in their first year, the district
has changed how it recruits mentor teachers. Now, mentor candidates must complete an
application form and state that they have enough time to be available for their mentee beyond the
five after-school New Teacher Induction program meetings. Further, because so many new
teachers have been hired, we have begun assigning mentors to more than mentee. However,
Dave’s point is valid; even if Robbinsville is hiring more new teachers than ever, then district
leadership needs to think more creatively about mentor placement and how novices gain access
to veteran expertise.
It is interesting to note that the Year 4 teachers did not specifically mention collaborating with their veteran colleagues, perhaps because by Year 4 they did not sense as much as a divide between themselves and their more seasoned peers. However, one could also speculate that the Year 4 teachers, with their charge to design professional development about their Year 3 Action Research project, were then seeing themselves as leaders and were naturally collaborating with veterans as they prepared and facilitated professional development for their grade level, department, and/or building peers and did not necessarily need as much verbal persuasion to increase their self-efficacy.

In short, Year 1 teachers relied on their assigned mentors to attain affirmation and ideas to improve their instruction. As the program shifted into Year 2 and 3, novices began expressing the desire to not just collaborate with their mentors, but also other veteran colleagues beyond their current practice of learning walks and coaching cycles. As a result, they could gain even more access to expertise and receive additional constructive criticism and encouragement about their practice. Finally, in Year 4, teachers did not mention a need to collaborate with their veteran colleagues, but that could be because they felt they had already “crossed the divide” and felt they were finally on the same developmental trajectory as their more experienced co-workers.

**Administrative feedback and relationships.** Besides mentioning how collegial support has aided instruction and self-efficacy, novices also spoke about how administrators’ feedback and/or verbal persuasion impacted their practice and/or confidence levels. As with teacher mentors, sometimes novices valued these relationships and in other instances, sought additional feedback from their building and content area administrators.
Year 1. In the October Year 1 professional development evaluation forms, six teachers out of twenty-seven shared they would like more administrative support and follow-up. They defined “support” and “follow up” as reminders of best practices, provision of resources, feedback during observations, and ongoing encouragement. On the November forms, there was no mention of administrative feedback or support. On the January forms, only one teacher asked for additional administrative support. This finding could indicate that teachers felt the amount of support and feedback from their administrators was adequate, especially by January since they would have already participated in two formal observations with a pre- and post-conference as well as at least one informal walkthrough. These three experiences would have provided novices opportunities to meet with and receive feedback from at least two different district administrators about their instruction.

Year 2. On the Year 2 October professional development forms, four teachers out of twenty-three referred to the importance of continued administrative support and to provide constructive criticism during informal walkthroughs and observations of strategies learned during Year 2 meetings. On the November and January forms, there was no specific mention of administrative support, but a few teachers in each session asked for continued coaching and provision of resources, which would fall upon district administrators to provide. As with the Year 1 forms, this data might signify that teachers felt they were provided with enough feedback about their practice during their designated walkthroughs and observations.

In the Year 2 survey, the teachers’ comments about administrative support were mainly positive with comments such as, “I feel like all the feedback and constructive criticism has helped me grow as a teacher;” “We had several meetings with administrators as well as our mentors. I felt as if I reached out or had a question I was given as much help as I needed,” and
“I was able to take the feedback given and apply it to future classes. I also was able to keep a journal tracking experience and progress made throughout the year.” These positive responses imply that the teachers valued their administrators’ feedback and were applying it to their instruction. They were not overwhelmed by constructive criticism and did not mention anything about this verbal persuasion negatively impacting their perceived level of self-efficacy. One out of the seven survey respondents shared, “I don't feel I was offered any feedback” which makes one wonder why the teacher felt they did not receive feedback and how the district was not able to successfully encourage and assist this novice through the observation process and the Year 1 program.

In the Year 2 focus group, two statements about administration were made by Hannah, a high school Science teacher. In the first, she was extremely positive about the program and the amount of administrative support she received, “I feel as though in the meetings that everybody is a learner even the people who are teaching it. I'm able to feel vulnerable and I feel supported in the meeting. If we didn't have that meeting, it's just like, ‘Oh, there you go. You're a teacher now. Go and do what you're supposed to do.’” However, though she felt championed during these meetings, she would have liked to have felt more supported by her building administrator, especially in regards to defending her decision making to overly involved parents:

I felt like, because I was a first year teacher, I was questioned a lot more than somebody who maybe had been here. I felt almost bullied at certain times with certain parents, the nature of their emails and phone calls. I even had a conversation with one of the administrators last year. She's like, ‘Oh, I think it's just like they know you're a first year and it's like,’ she used the word hazing, which made me feel even more uncomfortable. It was known that that was how it happened. I think it's more after it happens, knowing that you're going to be backed up.

As Kapadia, Coca, and Easton (2007) found, administrators have a significant impact upon how novices’ perceive the job and their likelihood to remain in the profession. Therefore, it is
important to continue to work with Robbinsville administrators about how to best support novices’ as they acclimate to teaching. This form of support can involve additional feedback about instruction, but also providing novices with resources and encouragement when faced with obstacles such as difficult parents.

**Year 3.** On the Year 3 October professional development forms, five out of the twenty teachers shared how they wanted to ensure their administrator mentor (who was not yet assigned) was able to provide helpful feedback and advice. On the January forms, only two teachers asked for more time to meet with their administrator mentor about their action research project. On the Year 3 survey, there was only one negative comment in the twelve responses about the amount of feedback provided during and after induction sessions, “The induction program focused on new ideas, but did not give us much time to receive criticism in a safe place.” It should be noted that this participant shared that he/she was from the grade 6-12 group whose building administrators did not attend the meetings. In fact, I noticed that the majority of the positive feedback about administrator support was from the elementary school where at least one building administrator attended every induction session and where the K-8 Supervisor’s office (who is an induction facilitator) is located. It is possible that these teachers felt a greater connection to their administrators because they saw their leaders attend or lead professional development experiences. This theme should be considered when following up with administrators in how they can better support their novice teachers; feedback should not just be provided during the observation process but also during professional development sessions and informal conversations (Kardos et al., 2001; Wood, 2005; Wood & Stanulis, 2009).

Other more positive survey responses stated, “The door is always open for more immediate/informal feedback,” “The administrators attended the meetings and genuinely cared
and communicated about our efforts in the classroom. It created a safe environment and community of learners in the meeting,” “I truly value my relationships with our administration. I know they are here to support me and offer me their experience and support. I feel comfortable reaching out to them, which is very important to me,” “When I wanted to show my Socratic Seminar an administrator came in that day and watched the whole seminar. I was then provided positive feedback” and “Yes, the meetings provided enough feedback. I feel that it works because it is not overbearing, but gives you learning tools that you can use in your class. You never felt pressured to use everything that you were given” and “Administrators have always been readily available to provide on-the-spot feedback during induction professional development sessions.” These statements tie directly to self-efficacy theory since teachers referred to how the administrators’ feedback or verbal persuasion helped teachers feel more at ease and competent in their instruction (Leithwood & Jantzi, 2008; Skaalvik & Skaalvik, 2010).

This positivity continued in the Year 3 focus groups, with teachers continuing the idea that a four-year program helped teachers feel that administrators believed that growth occurs over time and that one “bad” observation meant the teacher was ineffective. One teacher even said she viewed her administrators as a “shoulder to cry on” and as her cheerleaders. Lisa, an elementary teacher, mentioned how she had an administrator observe her right after she learned a new strategy during an induction session, “There was the comfort ability to say, I can try this in my class and you can come watch me. I'm not going to feel like if I mess up it's going to be atrocious. Just that openness and connection, that support, has always been so helpful to practice and to try these things in the classroom.” Kelsey, another elementary teacher, also expressed that she felt invested in and that the program was more than just about receiving tenure, but becoming a better teacher:
I also feel like it presents an idea from an administration ... or rather from even the
district to us as new teachers, that we're valued. That we're worth investing in for four
years. It's not just like, ‘Oh great, you're here. Thanks, we might fire you by next year if
we don't like you, and we care, we want to see you succeed. We want to keep you. Even
if you're not so great during your observation, that's okay. You're going to come to our
next [induction] meeting. We're going to teach you how to do this, this, and that.’ I feel
like it creates a firmer foundation for us coming in, shows us that we are valued, and
that we're worth investing in. I also don't know the statistics but it also just shows that
we'll be here longer. We are in our family, like we always talked about Sharon School is
like a family and this district as being really tight, a great community. I think that really
says a lot.

Kelsey felt this amount of support and feedback helped her become a part of a community and
that there was no “divide” between herself, a novice teacher, and her administrators. Lizzie also
felt this sense of togetherness and connection; she commented, “Just-thank you for investing in,
us, new teachers. We need it and have grown so much from it. It really shows that we are
valued.” This perception of administration’s dedication of developing novice teachers prompted
feelings of positive self-efficacy in these Year 3 teachers.

Year 4. On the Year 4 professional development evaluation forms, teachers were asked if
they needed additional administrator support during their Year 4 project, which is turn-keying
their Year 3 action research project to a greater audience. Responses included, “I think we are
very well supported!”, “I am happy with the amount of support I received,” “As long as we are
supported during our third year, the fourth year project is a pretty natural progression,” and “I
feel supported. All I needed was one to two
meetings with an administrator to run the
presentation by them.”

On the Year 4 survey, teachers focused their feedback about administrator support and
around their experiences with an administrator mentor during the Year 3 action research project.
Of the six responses, four deemed their mentor “extremely helpful,” one found his/her mentor
“somewhat not helpful,” and one said his/her mentor was “not helpful at all.” For the positive
feedback, teachers shared commonalities of their mentors being easily accessible, interested in their project, and helpful in providing resources and ideas: “Sometimes working with an administrator can be intimidating. I was fortunate to have a good working relationship with my administrator and we had some great discussions which helped me when I was able to hear their point of view on some things. It was nice to hear they faced some similar challenges as a teacher as well,” “My mentor was easy to access and always willing to help. I felt very comfortable talking to my mentor about my project and she gave me ideas about how I could implement my project in my classroom. I could tell that she was also interested in my topic so I felt that she was giving such genuine and thoughtful feedback” and “My administrator mentor was excited for my project, listened to my concerns, was a great partner for bouncing ideas off of, and was brimming with useful ideas I could implement.” These quotes illustrate how the Year 3 teachers were making connections and “crossing the divide” with their administrators. They mention the one-on-one meetings as helping them see their administrators faced similar challenges and/or had similar areas of interest. These one-on-one relationships might have made novices feel more comfortable accepting feedback or suggestions on how to enhance their instruction. Further, these relationships continued into Year 4 when the novices began turn-keying their action research projects. Four teachers mentioned that they had begun reaching out to their mentors from the previous year about how to best share their knowledge with their colleagues. The induction program did not ask the novices to contact their mentors; they felt comfortable enough to reach out to their administrator mentor for advice and feedback without prompting and were eager to continue the relationship.

Nonetheless, not everyone was able to forge these important connections. The two novices who found their mentors “somewhat not” or “not at all” helpful divulged, “While both
kind and supportive, my mentor was unfamiliar with my topic and could, therefore, not supply specific suggestions” and “My mentor was new to the district and didn't have a clear picture of what was expected. I was sent back to the drawing board several times with no real goals.” The two teachers who laid bare their frustrations in the survey also shared their experiences during the Year 4 focus group. As with assigning teacher mentors, the induction program can improve how it pairs novices with administrator mentors. For example, induction program facilitators like myself can better explain the rationale and purpose of the project to new administrators so they can provide the constructive criticism and assistance novices need to successfully complete the action research process and help the novices reflect upon the process in order to enhance teachers’ instruction and increase their sense of self-efficacy.

Though the study participants disclosed that they sometimes needed more administrator support to feel efficacious and effective, the majority of the novices believed that their relationships with administrators deepened throughout the length of the program. The Year 1 teachers’ responses indicated they felt they received enough verbal persuasion via the induction meetings and evaluation process, Year 2 teachers expressed that they felt supported when implementing the program’s strategies and received non-evaluative feedback during meetings, and the Year 3 and 4 teachers had mainly positive things to say about building one-on-one relationships with their administrator mentor during the action research project. In fact, some Year 4 teachers still felt connected to their mentor after the project and crossed the “divide” on their own by asking their administrator for additional guidance. If the program had ended after one or two years, teachers would not have been assigned an administrator mentor and might not have been able to establish these close bonds with their building and content area leaders that aided their self-efficacy and instruction. Further, these experiences may have facilitated novices
along the developmental trajectory towards more outward-looking, tenurable teachers (Conway & Clark, 2003; Fuller & Brown, 1975). Please see the table below for a review of how novices felt the program helped them make connections and receive feedback from their fellow cohort members, veteran colleagues, and administrators.

TABLE 7 Key Findings by Year for Theme #4: Crossing Wider and Wider Divides and Building Relationships

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tr>
<td>Fellow cohort members</td>
<td>Teachers relied upon one another mainly for emotional support.</td>
<td>Year 2, 3, and 4 teachers collaborated with one another to plan instruction and to seek affirmation that they were on the “right path.” These connections helped them hone their instruction and feel more confident in their practice. The program fostered collaboration and verbal persuasion by providing consistent opportunities for novices to work together and reflect upon their progress even though they were in different grade levels, content areas, and/or buildings.</td>
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<td>Veteran colleagues</td>
<td>Teachers relied mainly upon their assigned mentor for encouragement and feedback that helped them feel more efficacious and improve their instruction.</td>
<td>Year 2 and 3 teachers valued opportunities when they could collaborate not just with their assigned mentors, but with department and/or grade level colleagues so that they could acquire additional feedback and encouragement from other veteran colleagues.</td>
<td>Year 4 teachers did not express a need to collaborate with veteran colleagues, but this might be because they had already “crossed the divide” and were leading professional development sessions for more experienced teachers.</td>
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<td>Administrators</td>
<td>Year 1 and 2 teachers indicated that the feedback and resources received during the induction meetings and evaluation process positively influenced their instruction.</td>
<td>Year 3 teachers made one-on-one connections with their administrator mentor that helped them see that others also experienced challenges (which was seen as encouragement and helped promote self-</td>
<td>Year 4 teachers independently connected with their previous year’s mentors for guidance and feedback about turn-keying their action research project; the novices did not need help</td>
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efficacy) and received feedback throughout the action research project that improved their instruction. crossing the divide since the majority had formed strong relationships with their mentors during the Year 3 project.

Table 7. Key Findings by Year for Theme #4; Adapted from Fitzpatrick, Sanders, & Worthen (2011).

Theme #5: The Importance of Early and Ongoing Vicarious Learning

Another key aspect of the induction program proved to be vicarious or observational learning, or when novices have opportunities to visit veteran peer’s classrooms and watch a master teacher model specific instructional strategies, reflect upon their own practice, and receive feedback from an instructional coach and/or administrator about their progress (Smith & Ingersoll, 2004; Skaalvik & Skaalvik, 2010; Strong, 2009; Wong, 2004). Throughout the data, all the participants who participated in vicarious learning experiences (that the district calls these sessions “learning walks” and/or “coaching cycles” depending on the subject area and grade level) believed that these opportunities benefitted their instruction and self-efficacy. In fact, the only negative feedback was that teachers wanted to receive even more time to observe master teachers and reflect upon instructional strategies. Interestingly, data from Year 1 and Year 2 indicated that teachers did not really mention vicarious learning as much as Year 3 and Year 4 teachers besides in a handful of professional development evaluation form responses asking for additional opportunities to see their colleagues in action. This lack of data could be due to where the teachers were in the induction program curriculum; most Year 1 and Year 2 teachers were either about to begin participating in vicarious learning experiences in the fall of 2016, or had only had one opportunity thus far to participate. Year 3 and Year 4 teachers provided more
specific reflections and feedback about this vital aspect of the program and shared how these experiences shaped their practice throughout each year of the program.

**Year 3.** As mentioned previously, the Year 3 teachers appreciated the vicarious learning experiences, believed this element of the induction program positively influenced their self-efficacy and instruction, and wanted even more opportunities to see others in action. In the Year 3 survey, responses included, “It was very helpful to observe other teachers then reflect during the first year. I wish we had the opportunity to do much more of that!” and “Having opportunities to observe other teachers in my content area could be helpful in learning new strategies that best work within the population/ subject area.” In the Year 3 focus groups, Reagan, an elementary teacher, reflected that observing others was one of the most rewarding professional development experiences she participated in:

> I was coming to this meeting thinking some of the most valuable learning experiences I’ve had as a teacher have been watching other teachers. I had two that completely revolutionized the way I taught. When I watched Megan Wells and then she watched me, then we did a little co-teaching, too. I did the same thing for Courtney with Writers Workshop. Even just going to the middle school and watching a few of the teachers, had a huge impact. [What] I did with Megan and Courtney, really changed both of those subjects for me.

Lizzie, her elementary colleague, agreed:

> Observational learning is so helpful. I agree with Reagan. Working with the coaches and everything [observing other teachers] was ... like you said, game changing. Even today, I went to Amber’s room and we read a book together. It was a new book and I was like, let’s just read this together. Just the way that we both lined up our classes and had them sit. She says to me, ‘I never thought to ever line my kids up like that.’ It sounds silly, lining up kids. How do you do it more than one way? You do. I want to go see Lisa teach math and I want to go see someone do science. Or just walking around, talking to each other, and just looking is so valuable with each other. I think that would be even cooler, for teachers to see one another. Just to build those relationships and that trust with each other.

These statements demonstrated that teachers positively benefitted from seeing how others implemented strategies because they could then reflect upon their own instruction and feel either
affirmed in their choices or confident enough to try something new because they saw their colleague be successful (Skaalvik & Skaalvik, 2010; Woolfolk Hoy & Burke-Spero, 2005).

As with the Year 3 survey, Year 3 focus group teachers also commented that they sought more vicarious learning experiences. Clara, high school Special Education teacher, said:

[I would like to be] able to see more strategy in action. I know our first year we were able to go around to different classes and they'd all have a chance to observe other teachers doing different strategies and how their classroom routines are and things like that. Maybe when having another opportunity to be able to go see some veteran teachers and some of their strategies, just other opportunities to be able to see things in action with ... or even maybe even in another school of seeing like, going to another high school life skills class and being able to see more about what they do or another AP class and how other schools or other teachers make use of the strategies based off of the content area. Just to see how it works with their group of students and then kind of being able to determine how that works with yours.

Because of scheduling conflicts and being unable to find enough substitute coverage, Clara was only able to participate in one professional development day of vicarious learning during Year 1 of the induction program. Consequently, she stated she would have loved to participate in more vicarious learning in Years 2 and 3 so that she could observe others’ employ effective techniques and apply them to her own practice. Kelsey, an elementary teacher, also provided suggestions about when this learning should take place since she already thought she had “bad habits” by the time she was able to visit other classrooms:

I remember having to sit in to someone's classroom and watch, then discuss. At the end of it, it just didn't feel like it was enough or it was too late in the year, that I already had my bad habits down...I just feel if we had an earlier time with certain things or earlier PDs with information given, it would benefit us throughout the second year.

This feedback from both Clara and Kelsey should be considered by the induction program when planning future observational learning opportunities; the Year 3 teachers wanted vicarious learning experiences earlier in the school year as well as more often throughout the program.
Year 4. The Year 4 teacher’s comments about vicarious learning aligned with the other participants’ feedback. In the Year 4 survey, one teacher wrote, “I would love the opportunity for more learning walks and professional development opportunities as I am still growing as an educator and love getting new ideas!” In the focus group, Chloe, a middle school Math teacher stated, “Two years ago, I came to the high school to observe a couple math teachers, which is awesome, and I’d really love to be able to do that again.” Melanie, an elementary teacher reflected, “[In our first years], we got to see a very wide variety [of teachers]-and I think it was helpful to see people who have clearly mastered their craft, and then take things and work them into your own classroom.” Both Chloe and Melanie felt that they acquired new strategies and routines to try out when they visited other classrooms. They both also commented how they saw routines and procedures in place that they also utilized, which helped them feel affirmed in their decision making and more confident about their ability to deliver effective instruction.

Paula, a high school Technology teacher, asserted that these experiences were important, “If when you're starting out, you got to observe other teachers. I know that that's supposed to happen with the mentor relationship [but it does not happen enough]” and Nate, a middle school Technology teacher responded, “Getting release time to go see other classes—would be awesome.” These two teachers particularly found vicarious learning to be helpful since they self-identify as “islands” where they are in only one or two person departments and do not have many opportunities to observe their colleagues or discuss instruction. Nate and Dave, who were energized and inspired to innovate their instruction after their learning walks, suggested that the program should require all teachers to participate in observations by a certain date to ensure that teachers have this valuable experience and could reflect upon it together. Otherwise, they
thought the various duties and responsibilities of teaching would deter their colleagues from signing up for these opportunities on their own.

In summary, Year 3 and Year 4 teachers found vicarious learning to be beneficial to both their self-efficacy and instruction, but suggested that more of these opportunities should be provided throughout the induction program and as well as for veteran teachers. They did not think vicarious learning should have ended after Year 1, 2, or even 3. In the Year 4 survey, one respondent asked for additional vicarious learning experiences and Nate and Dave, two Year 4 teachers, requested that we require novices to participate in learning walks and coaching cycles since they were able to observe master veteran teachers employ some of the same routines they utilized every day. These suggestions, along with my other major findings and an overview of the entire study, will be discussed further in the final chapter of this paper. Please see the table below for how teachers perceived vicarious learning throughout the program.

TABLE 8 Key Findings by Year for Theme #5: The Importance of Early and Ongoing Vicarious Learning Experiences

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<th>Vicarious Learning Experiences</th>
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<th>Year 3</th>
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<td>Year 3 and 4 teachers reflected upon the Year 1 and Year 2 coaching cycles and learning walks they experienced; shared how these opportunities helped them see additional strategies and routines that they could embed in their own instruction and/or affirmed their own decision-making; wanted even more of these experiences throughout the year. At the time of the study, current Year 1 and 2 teachers had yet to experience many vicarious learning opportunities for them to reflect upon.</td>
<td>No specific vicarious learning experiences were mentioned; individual teachers could observe others as part of their Action Research project. Teachers mentioned they would have liked more vicarious learning experiences throughout the program and earlier in the school year.</td>
<td>Teachers did not describe any vicarious learning experiences during this year of the program, but they wanted to continue to participate in learning walks and/or coaching cycles and asked that the program require all teachers to observe colleagues each year since they found the sessions</td>
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so beneficial to their instruction and confidence level.

Table 8. Key Findings by Year for Theme #5; Adapted from Fitzpatrick, Sanders, & Worthen (2011).
Chapter V

Discussion

In this chapter I summarize my study’s findings, implications of these findings, and areas for future research. I conducted this study because I am passionate about inducting and developing novice teachers into what many consider a demanding, isolating, and stressful profession. Too often novices have the same responsibilities as their seasoned, veteran peers but are not adequately trained in effective classroom management, communication, and instructional models (Lortie, 1975; Fry, 2010). Consequently, research has shown that by the fifth year of teaching, anywhere from 30-50% of novice teachers switch schools or leave the profession altogether (Smith & Ingersoll, 2004). The Robbinsville New Teacher Induction program was created to ameliorate feelings of isolation and instruct novices in a variety of instructional approaches to help them develop confidence and meet the needs of diverse learners. Robbinsville administrators believed that the multi-year program was benefitting teachers, but had no evidence that these induction supports were improving teachers’ sense of self-efficacy and instruction.

Therefore, the purpose of this qualitative evaluation case study was to explore novice teachers’ views of the multi-year induction and its perceived impact upon self-efficacy and instructional practice to determine if the district was doing whatever it could to develop and retain confident, effective teachers. My research question was: From a novice teacher’s perspective, in what ways does the multi-year induction program in the Robbinsville School District contribute each year to changes in his/her self-efficacy and instructional practice? My goal was to consult with Year 2, 3, and Year 4 novice teachers to discover how self-efficacy and instruction evolved (or not) through each year of the program. Robbinsville school district’s
multi-year induction program is unique in that it is one of the few New Jersey school districts to have more than one year of induction support, let alone four. I aimed to discover if teachers felt that four years of targeted induction support helped them feel more efficacious and more competent in the classroom or if they believed that a shorter, more traditional program would have been enough to address their developmental needs and help them become confident and successful in their chosen profession (Fuller & Brown, 1975). Ultimately, I wanted to know if the multi-year program, with its use of human and material resources over the course of four years, was helping our novices feel more efficacious and competent because teachers who have these qualities are less likely to leave the profession (Skaalvik & Skaalvik, 2010; Tschannen-Moran & Woolfolk Hoy, 2006).

My theoretical framework relied upon social cognitive theory, specifically self-efficacy theory. Social cognitive theory argues that the environment provides models for behavior and that environment and people influence each other through behavior (Woolfolk Hoy & Burke-Spero, 2005). Consequently, humans learn by observing others’ behaviors in a social environment, internalizing what they observe others’ doing, and imitating those behaviors (Bandura, 1997). A new teacher induction program embodies social cognitive theory because it provides a non-evaluative social environment where novices learn instructional techniques, observe and collaborate with master teachers, and attempt implementation of new skills and knowledge. Social cognitive theorists assert that these opportunities activate learners’ self-efficacy (Bandura, 1997). Self-efficacy is grounded in social cognitive theory because it emphasizes human agency, or the belief that humans have some influence over their actions.

As stated previously, self-efficacy is important because, “it has been shown to predict teachers’ goals and aspirations, teachers’ attitudes towards innovation and change, teachers’
tendency to refer difficult students to special education, teachers’ use of teaching strategies, and
the likelihood that teachers stay in the teaching profession” (Skaalvik & Skaalvik, 2010).
Therefore, this study not only attempted to evaluate Robbinsville school district’s multi-year
New Teacher Induction program by exploring the teachers’ perceptions of how the program
impacted their instruction, but also their level of self-efficacy. That way, I could ascertain if the
program was meeting novices’ needs and possibly encouraging effective teachers to remain in
the profession.

Summary of Findings

Through this qualitative evaluation case study, I have been able to determine teachers’
perceptions of a multi-year induction program’s influence upon their self-efficacy and
instruction. The focus groups, professional development evaluation forms, and surveys revealed
how teachers experienced each year of the program and generated five key themes. To begin,
teachers felt that the multi-year format emphasized development over time and that this support
led to perceived higher levels of self-efficacy and gradually improved instruction. Additionally,
teachers believed that the multi-year program encouraged risk-taking and experimentation in
their classrooms that also positively benefitted self-efficacy and instruction. Next, novices shared
how the program curriculum promoted changes in practice that were differentiated to the
teachers’ level of development, added to their respective “teacher toolbox,” and improved their
instruction. Another pivotal theme was how the four years helped teachers “cross the divide” and
form relationships with other novices, veteran colleagues, and administrators, all of which
provided verbal persuasion that increased perceived levels of self-efficacy and enhanced
novices’ instruction. Finally, teachers emphasized the power of vicarious learning and how

observing master teachers helped them learn innovative strategies and feel more confident in their own practice.

For the first finding, teachers indicated how each year of the program accentuated the idea that development occurs over time and that one does not become a master teacher after just one year (Fuller & Brown, 1975). Teachers disclosed that instead of being expected to know everything about teaching after their first year, the multi-year program acknowledged their developmental concerns and encouraged them to learn innovative instructional practices over time with support from their administrators, mentor teachers, and cohort members (Fuller & Brown, 1975; Kagan, 1992; Watzke, 2003). This idea of learning over time ties to mastery experiences, an aspect of self-efficacy theory. Essentially, the program allows teachers to slowly acquire accomplishments regarding student achievement or learning and in turn, increase feelings of self-efficacy (Tschannen-Moran and Woolfolk Hoy, 2006).

Further, the induction program’s format permitted novices to delve into more sophisticated strategies such as action-research in the later years of the program instead of learning and implementing all the professional development topics within one year. Teachers expressed that because they learned more complex strategies once they were more “settled into” the profession (and further along the developmental continuum), they were more likely to take risks and experiment with innovative techniques (Fuller & Brown, 1975). If teachers felt these risks improved their practice, then their emotional and psychological arousal were positively impacted. These positive emotions helped them associate teaching with a positive state of mind and helped them become receptive to additional learning and risk-taking (Skaalvik & Skaalvik, 2010). A few of the Year 3 and Year 4 teachers also indicated that their risk-taking extended
beyond the classroom; the program inspired them to become teacher leaders who facilitated professional development for their grade level, department, and/or building colleagues.

Another major finding was discovering how the multi-year curriculum met novices’ developmental needs and contributed to teachers’ instructional knowledge and perceived level of self-efficacy. First, the vast majority of novices indicated that the program’s curriculum and format promoted positive changes in practice since the sessions explicitly taught strategies (helping novices form a “toolbox”) and then asked teachers to implement and reflect upon them. The vast majority of topics were also (for the most part) tailored to each cohort’s developmental needs, providing support in areas such as differentiated instruction, lesson planning, instructional technology, student-centered instruction, and action research and becoming increasingly more complex and “outward looking” as teachers progressed through the program (Billingsley et al., 2004; Davis & Higdon, 2008; Fuller & Brown, 1975; Shanks & Robson, 2012). As mentioned previously, the induction program curriculum also promoted mastery over time and risk-taking, both of which positively contributed to teachers’ self-efficacy.

Within the same theme of adding to a teacher’s toolbox, when reviewing the multi-year curriculum, it also became apparent that the novices would have liked more choice in their professional development, particularly during Years 1 and 2. Suggestions for professional development topics included building relationships with parents, pedagogical content knowledge, and discussing emergent problems of practice. These topics relate to Fuller and Brown’s (1975) Stages of Concern since early teachers worry about how they are perceived, their daily survival, and basic instructional tasks. Further, as Feiman-Nemser et al. (1999) argue, all “…teachers need learning opportunities that are connected to their daily work with students, related to the teaching and learning of subject matter, organized around real problems of practice,
and sustained over time by conversation and coaching” (p.12). This feedback prompted me to include “Problem of Practice” themed induction sessions for Year 1 and Year 2 teachers in the Spring of 2017.

As for the theme of “crossing the divide,” the data indicated that, more often than not, novices received feedback about their implementation from their peers, veteran colleagues, and/or administrators. This feedback, or verbal persuasion, provided constructive criticism and encouragement in an isolating profession. Teachers who receive consistent positive and/or constructive feedback are more likely to feel efficacious (Woolfolk Hoy & Burke-Spero, 2005). Indeed, the novices shared that this feedback from their veteran colleagues and administrators promoted feelings of positive self-efficacy and helped them reflect upon and improve their practice. Moreover, the novices indicated how much they valued the cohort model since it connected them to others who were experiencing the same highs and lows of becoming a teacher and challenged them to discuss and reflect upon their practice with one another. Through each year of the program, relationships within the cohorts became stronger, with teachers sharing how they began to naturally seek each other out as a resource and/or sounding board even though they taught in different grade levels, content areas, and/or buildings. As a result, teachers believed attending the program as a cohort positively impacted their instruction and self-efficacy as they collectively transitioned from novices to experienced teachers (Woolfolk Hoy & Burke-Spero, 2005).

Nonetheless, the data also indicated that while the majority of teachers found their assigned mentor teachers and administrators helpful, they felt some administrators and mentor teachers could have been better prepared in how to support novices in their first years of teaching. Study participants disclosed how some mentor teachers neglected to follow district
expectations and/or did not provide as much verbal persuasion as novices would have liked. This finding is key because research indicates that the most effective form of mentoring is educative mentoring, where mentors are clear in their vision of quality teaching, collaboratively plan with their mentee, encourage reflection, and provide novices with feedback (Billingsley et al., 2004; Hellsten et al., 2009; Kent et al., 2009; Smith & Ingersoll, 2004; Wood & Stanulis, 2009). Some of our district mentors were not adequately prepared to become an educative mentor.

Further, though the majority of the novices found administrators to be helpful in providing resources and verbal persuasion, some secondary teachers shared that they would have liked to have felt that their leaders “had their back” in regards to demanding parents (Kardos et al., 2001). In addition, two of the Year 4 teachers believed that their administrator mentor for the Year 3 action research project could have been more knowledgeable about the project and been better prepared about how to assist their assigned novice through the process. This constructive criticism is important because as Wood and Stanulis (2009) assert, “Although most teachers cite their mentors as the most important person in their entry into teaching, many novices cite having a supportive principal [administrator] as the most critical factor in their professional development” (p. 11). The Robbinsville administrative team must consider how to better support our novice teachers throughout the program.

Finally, a consistent finding throughout the cohorts was that teachers sought more opportunities for vicarious learning, or observing others’ modeling an instructional strategy or technique. They wanted to visit master teachers’ classrooms as well as each other’s to discover innovative approaches, helpful routines and procedures, and to seek affirmation for their own instructional choices. If teachers identify with the modeler or feel that they can successfully implement a given strategy or approach, then both their knowledge of instruction and self-
efficacy are likely to increase (Tschannen-Moran & Woolfolk Hoy, 2006). Vicarious learning was not just sought out in Years 1 and 2, but throughout the program since teachers believed it helped them become more reflective and apply innovative strategies to their practice. The participants also recommended that vicarious learning continue beyond the New Teacher Induction program since they believed this support was so beneficial to their instruction.

**Limitations**

It should be noted that because this is an evaluative case study of the Robbinsville New Teacher Induction program, my findings will have a few important limitations. The size of the sample, especially since it only took place in one school district, means the findings are not necessarily generalizable. Further, my former role as a former New Teacher Induction program facilitator and my current position as the acting Assistant Superintendent of Curriculum and Instruction might have influenced the participants’ responses even though I utilized anonymous data sources as the main part of my data collection and did not conduct the novices’ formal evaluations. Finally, all of the data is self-reported. The study emphasizes the teachers’ perceptions of professional development and self-efficacy rather than direct measures of effectiveness.

**Implications for Practice**

This qualitative evaluation case study’s findings suggest that the Robbinsville New Teacher Induction program is positively influencing teachers’ perceptions of their self-efficacy and instructional practice as they experience the first years of a stressful profession. The phrase “first years” is emphasized because teachers consistently shared how each year of the program contributed to their self-efficacy and instructional practice and that they appreciated how each year of the program helped them develop into more confident and effective teachers. Though it is
rewarding to hear how the program is positively affecting our novice teachers’ development, there are still several implications for practice, or recommendations, that the district should consider as it continues to review and improve the multi-year program.

**Offering more choice in teachers’ professional development.** When examining the study’s findings, it became apparent that teachers sought more choice or input in their professional development, specifically during Years 1 and 2 (professional development is differentiated in Years 3 and 4). In the past, New Teacher Induction facilitators such as myself have solicited feedback for topics, but it appears that teachers would not only like to suggest topics such as parent communication, but also receive time to analyze pressing problems of practice with their mentors and/or peers. There is a natural tension of determining how much professional development should be pre-determined so that teachers receive training on district initiatives and our expectations for curriculum and instruction, but also have opportunities to have their individual needs met. Our program review indicates that the district must consider how to incorporate topics that focus more upon “surviving” and inward-focused strategies into some of the first ten induction sessions so that novices’ needs are met while they are also learning what it means to be a successful Robbinsville educator. We will continue to solicit ideas for future professional development topics to have a stronger understanding of what teachers feel they need to learn.

**Providing more content area support.** The New Teacher Induction program aims to provide a multitude of supports for novice teachers, but study participants across all four years felt that they needed additional assistance in their individual content areas. While this support is important, the induction program focuses on general instructional techniques that can be applied to any content area and already faces time constraints since the meetings only take place either
three or five times a year. In this limited time, we try as much as possible to help teachers connect the strategies to their content area and provide time for application between meetings.

That being said, I believe that this finding is still important to consider on a district level. Currently, secondary teachers (grades 6-12) have one departmental meeting a month and primary teachers (grades K-5) have approximately one grade level meeting a month. Too often, this time is taken up by state or district initiatives and teachers do not have enough opportunities for lesson and unit planning, designing assessments and reviewing data, and horizontal and vertical articulation. District professional development days, while they offer choice, also tend to not provide teachers with time to discuss how to innovate content area pedagogical practices. As the Acting Assistant Superintendent of Curriculum and Instruction, I intend to discuss this issue with the administration team and analyze how we currently utilize professional development days as well as department and grade level meetings. Therefore, we can reflect upon our current practices and begin to prioritize opportunities for teachers to discuss their craft with their closest colleagues and build their pedagogical content knowledge. Consequently, not only will novices benefit from these changes, but also our veteran teachers.

**Involving more administrators in the induction process.** Another important finding was that though the majority of novices formed positive relationships with their administrators and enjoyed partnering with an administrator mentor during the Year 3 Action Research project; our administrators need to be further informed of the “novice experience” as well as their role in the Year 3 project. To help train our administrators, I intend to share the information about early teacher development (Conway & Clark, 2003; Fuller & Brown, 1975; Kagan, 1992; Watzke, 2003) and data gleaned from this study with our administration team during our Leadership Retreat at the beginning of the 2017-2018 school year to help them become more aware of
novices’ needs. I will emphasize what the research says about Fuller and Brown’s (1975) Stages of Concern and how some of Robbinsville’s own novices felt isolated, overwhelmed, and sought additional feedback in areas such as how to handle difficult parents, even after their first year of teaching. Further, I will encourage more of our administration team to attend the induction meetings, especially in Years 1 and 2, so that both the novices and administrators see each other in a different setting and that teachers feel they have additional mentors with whom they can discuss their induction sessions and how to implement their learning. Finally, I will re-communicate the program’s expectations of Year 3 Project mentors and be more mindful of training new administrators about how to navigate this important role.

**Additional mentor teacher training.** Though the majority of the novices shared that they found their mentor teacher helpful, I believe that the district could do more to assist our mentor teachers so that they feel adequately equipped to assist novices throughout their first year. We currently have one day of summer training and mentors attend all five induction meetings with their mentees, but I would like to have at least one or two follow-up sessions during the school-year to check-in with mentors and provide some explicit instruction in how to coach and provide support to novices. I intend for these meetings to further explain novices’ development, clarify our expectations of mentor teachers, offer strategies for mentors to help novices feel successful, and provide support for our mentor teachers as they work intensely with their assigned novices. As a result, mentors will feel more prepared to manage this important relationship and novices will have an educative mentor who is more knowledgeable of their needs.

**Additional opportunities for vicarious learning.** The most resounding suggestion from our teachers was that they wanted more opportunities to visit their veteran colleagues and each
other’s classrooms throughout all four years of the program. As we plan the 2017-2018 New Teacher Induction Program, we will incorporate more “learning walks,” where teachers visit multiple classrooms in a given day and debrief about what they saw, as well as coaching cycles where teachers work with an instructional coach in the area of literacy, math, or instructional technology and receive feedback about their instruction. In the past, we have focused upon having novices visiting veteran teachers, but I would also like for novices who are further into the program (Years 3 and 4) observe each other as they implement their action research projects and execute innovative ideas. This shift could further challenge our novices in Years 3 and 4 of the program so that they continue to discover innovative ideas and deepen relationships with their fellow cohort members. The district will make the commitment of finding substitute teachers to cover classes so that we can offer vicarious learning experiences at least three or four times a year for all our novice teachers.

**Building a bridge between novice and veteran teachers.** Finally, I think it is important to consider how the New Teacher Induction program can strengthen the ties between our veteran and novice teacher populations. Currently, approximately 40% of our staff is non-tenured. They have participated in the multi-year program and have learned an assortment of instructional techniques and have, or will be expected to, complete action research and turnkey their findings to their peers. This means that our veteran staff members are not included in these professional development experiences and are not as knowledgeable in instructional models such as Socratic Seminars or student-centered questioning techniques. For this reason, I aim to incorporate some of these topics into future district professional days so that our more seasoned teachers have a chance to learn from and alongside our newer staff members. I foresee some of our Year 4 teachers being able to facilitate these professional development experiences as part of their Year
4 project, which will help them continue to take risks, become leaders outside of their classroom, and deepen their relationships with veteran colleagues. In addition, I aim to have novices participate in even more learning walks and coaching cycles with veteran teachers so that novices can access additional expertise and develop these important relationships. Finally, I want to work with building principals to discuss how to build social connections between these two groups. That way, our schools are neither considered novice nor veteran-oriented, but places where all teachers’ voices are valued.

**District professional development.** Another implication from this study was learning which professional development experiences teachers valued more than others. To begin, novices appreciated having autonomy in Years 3 or 4 where they chose their own action research project and the method in which they would turn-key their learning to peers and community members. Further, Year 3 and 4 teachers appreciated the inquiry process and sought professional development that encouraged them to delve deeper and research topics that helped them reflect upon student learning. Finally, teachers enjoyed participating in a cohort model. They found that having an ongoing and built-in support system helped them challenge one another, reflect upon their practice, and set goals for their learning. This evaluation inspired me to think about how we can more effectively help teachers achieve these professional learning goals. To begin, I intend to incorporate more autonomy, inquiry, and cohort learning within our district professional development days and ask all teachers (novice and veteran) about their individual needs.

**Reviewing the multi-year curriculum.** Though the majority of novices found the program beneficial and believed it met their evolving needs, it is still important to also routinely review the existing program curriculum. Since novices enter the field each year and new national, state, and district initiatives constantly emerge, Robbinsville should conduct annual
needs assessments of how the program can best support Year 1, 2, 3, and 4 teachers as they develop self-efficacy and effective instructional practices. This evaluation case study brought forth several findings on how the program can be improved and an annual review would ensure that the program is not just offering “more of the same” but meeting our novices’ diverse needs throughout each year of the induction process. Overall, I believe that the study’s findings demonstrate that the multi-year program provides ongoing, purposeful, and sustained professional development that addresses novices’ concerns and positively influences their perceptions of their self-efficacy and instruction. However, I believe that if implement these recommendations, we can strengthen our existing program and further enhance our novices’ confidence and practice so that they are less likely to leave our district or the profession altogether.

**Recommendations for Research**

This study, and its findings, have encouraged me to consider areas for future research. If my recommendations are carried out, a follow-up study could focus on how additional vicarious learning experiences, increased training for teacher and administrator mentors, and soliciting novices’ input for professional development might affect teachers’ perceptions of the induction program and its influence upon their self-efficacy and instruction. Further, it would be interesting to follow a cohort of teachers through each year of the program (and beyond) to see how they perceive the program and develop from year to year. My findings indicated that teachers benefitted from the multi-year model, but I would like to see how one cohort feels their self-efficacy and instruction are impacted as they experience each year of the program. Another possibility would be to compare cohorts with more or less years in the program to determine if novices would still experience the same changes in practice, risk-taking and experimentation,
and relationships with their peers, veteran colleagues, and administrators. For example, would
the novices be more likely to continue relationships with their fellow cohort members after a
one-year program or a four-year program? It would be interesting to investigate any of these
possible variations.

As for general research about multi-year induction programs, since this study is limited to
teachers of a wealthy suburban school district in Robbinsville, New Jersey, I would suggest that
researchers explore perceived impacts of other multi-year induction programs in other contexts.
Too few studies investigate the possible benefits and/or drawbacks of a multi-year model
(Glazerman et al., 2010; Youngs, 2002). Further, my study was qualitative in nature. It would
also be beneficial to review not only teachers’ perceptions of changes in their self-efficacy and
instructional practice, but employ measures such as the TSES (Teacher Sense of Self-Efficacy
Scale) (Tschannen-Moran & Woolfolk Hoy, 2006) and classroom observation tools to help
quantify the impact of induction supports upon self-efficacy and instruction.

Moreover, as Strong (2009) points out, “Much of the existing empirical research on the
effects of induction is a-theoretical; it examines what works, but not why or why not” (p. 41).
Researchers must begin to investigate why novice teachers respond to some induction supports
more than others. Some research has been conducted about the impact of self-efficacy, but most
studies still focus on how many teachers leave the profession rather than investigating which
interventions (such as vicarious learning opportunities, learning over time, verbal persuasion
from peers, veteran colleagues, and administrators, and learning over time) improve retention
and why. Possible research questions could be, “How does verbal persuasion from administrators
and mentor teachers influence novice teacher’s self-efficacy and intent to remain in the
profession?” and/or “How does an induction program’s inclusion of vicarious learning experiences influence novice teachers’ self-efficacy and instructional practice?”

Finally, the majority of studies about induction lack control groups and it is difficult to determine if teachers who have induction support are more likely to have high self-efficacy, effective instruction, and lower attrition (Strong, 2009). If researchers aim to determine the effects of different induction components like ongoing professional development or a reduced workload, they must compare those who receive assistance to those who do not. Therefore, induction researchers should consider designing more randomized trials of differing approaches to induction including duration, intensity, and types of support (Glazerman et al., 2010). In this way it might be possible to identify and implement induction programs that help improve self-efficacy and instruction and retain novice teachers.

Conclusions

In summary, the purpose of this qualitative evaluation case study was to understand the impact of a multi-year induction program upon Robbinsville novice teachers’ self-efficacy and instructional practice. Too often novice teachers experience haphazard and badly implemented induction programs that do not emphasize self-efficacy and/or help them become effective educators (Ingersoll, 2001; Ingersoll & Smith, 2004; Strong & St. John, 2001). Further, most novices receive only one year of support in spite of indications that they need more time to develop into “impact” teachers (Fuller & Brown, 1975). Yet there is limited research about and implementation of multi-year induction programs. The research that does exist about multi-year induction programs relies mainly on quantitative attrition data rather than in-depth conversations with teachers about their self-efficacy and instructional practice (Brown & Wambach, 1987; Cheng & Brown, 1992; Ingersoll & Kralik, 2004; Wong, 2004).
The data from my qualitative, teacher-centered evaluation study has allowed me to ascertain if our four year investment in novices helps them implement sound instructional practices and develop a mindset to overcome any professional challenges they might face. While the Robbinsville multi-year induction program is not perfect, teachers consistently stated that they felt the multi-year support helped them develop positive self-efficacy and instructional know-how that advanced throughout each year of the induction program. Further, they felt having only one year of support would have negatively impacted their confidence and effectiveness. As a result of participating in the program, many teachers shared that they felt “invested in” and “part of a community.”

If Robbinsville had a traditional one-year or even a two-year program, our teachers might not have felt as invested in or part of our community. The four-year model fostered continued relationships amongst cohort members, veteran educators, and administrators, promoted the idea that learning and mastery experiences occur over time, provided a curriculum that both continually challenged and supported novices during their first years of teaching, and offered a safe space to take risks. If these supports did not occur in Years 2, 3, or 4, our teachers’ perceived levels of self-efficacy and instructional practice might not have been as positively impacted.

Too many schools suffer from high rates of attrition because novice teachers are not receiving the assistance they need to become efficacious, effective educators (Cherubini, 2009; Cherubini et al., 2011; Smith & Ingersoll, 2004). This study has helped me review the New Teacher Induction program and identify areas to improve how we initiate our novices into the profession. I am now more aware of the program’s flaws and based upon the study’s findings, will continue to revise and enhance the induction process. That way, I can ensure that our
novices participate in a unique multi-year induction program that positively influences their self-efficacy and instructional practice and the district can state that our internal support system is doing whatever it can to develop as many confident and effective educators as possible.
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from http://www.nj.gov/education/pr/1415/nav/county/21/5510/index.html


### Appendix A
Descriptions of Novice Teacher Induction Program Professional Development

**TABLE A1 Year 1 Professional Development Sessions (Novices attend PD with mentor teachers)**

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic(s)</th>
<th>Facilitators</th>
<th>Format</th>
<th>Date &amp; Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Staff</td>
<td>Meeting mentors, building tours, introduction to evaluation tool, technology set-up, acclimation to Robbinsville culture, time to set up classrooms</td>
<td>Assistant Superintendent of Curriculum and Instruction, K-8 Supervisor of Curriculum and Professional Development, Director of Special Services, Administrative interns (current classroom teachers)</td>
<td>Whole group, small group, pairs, and individual practice learning</td>
<td>August 25th, 26th, and 27th 8:00am-3:30pm</td>
</tr>
<tr>
<td>Year 1 Meeting #1</td>
<td>Building a Positive Classroom Culture</td>
<td>K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group, small group, pairs, and individual practice with using positive language as well as self-regulation and mindfulness activities</td>
<td>After-school on September 30th  Graded 5-12: 3:10-4:10pm  Grades K-4  4:15-5:15pm</td>
</tr>
<tr>
<td>Year 1 Meeting #2</td>
<td>Writing Effective Objectives and I Can Statements</td>
<td>K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group, small group, pairs, and individual practice with writing student-centered lesson objectives</td>
<td>After-school on November 11th  Graded 5-12: 3:10-4:10pm  Grades K-4  4:15-5:15pm</td>
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<tr>
<td><strong>Year 1</strong></td>
<td><strong>Meeting #3</strong></td>
<td><strong>Differentiated Instruction</strong></td>
<td><strong>K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction</strong></td>
<td><strong>Whole group, small group, pairs, and individual practice differentiating products, process, and content for all learners</strong></td>
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<tr>
<td><strong>Year 1</strong></td>
<td><strong>Meeting #4</strong></td>
<td><strong>Special Education and the I&amp;RS Process</strong></td>
<td><strong>Director of Special Services, K-8 Supervisor of Curriculum and Professional Development</strong></td>
<td><strong>Whole group, small group, pairs, and individual practice with identifying the steps of the I&amp;RS process and designing instruction to meet struggling learners’ needs</strong></td>
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<tr>
<td><strong>Year 1</strong></td>
<td><strong>Meeting #5</strong></td>
<td><strong>Becoming a Reflective Practitioner and Setting Goals for Next Year</strong></td>
<td><strong>K-8 Supervisor of Curriculum and Professional Development</strong></td>
<td><strong>Whole group, small group, pairs, and individual practice with reflecting upon the Danielson Framework for Professional Practice and setting professional learning goals for the next year</strong></td>
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<tr>
<td><strong>Instructional Coaching throughout the year</strong></td>
<td><strong>Instructional Coaching cycles</strong></td>
<td><strong>Depending on subject area, district humanities, instructional technology, math, and/or science instructional coaches (K-5 teachers work with both humanities and math coaches)</strong></td>
<td><strong>Three to four month coaching cycles throughout the year; novices observe the coach, the coach then observes and co-teachers with the novice (and provides feedback afterwards), then the coach revisits the novice’s classroom to see how the feedback was implemented (and if</strong></td>
<td><strong>During the school day</strong></td>
</tr>
</tbody>
</table>
Novices debrief with the coach after each “round” of coaching so that they can better process the feedback and develop an implementation plan.

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*Table A1. Year 1 Professional Development Sessions;* Adapted from Fitzpatrick, Sanders, & Worthen (2011).
TABLE A2 Year 2 Professional Development Sessions (no longer with a mentor teacher)

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Facilitators</th>
<th>Format</th>
<th>Date &amp; Time</th>
</tr>
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<tbody>
<tr>
<td><strong>Year 2</strong></td>
<td><strong>Meeting #1</strong></td>
<td>K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group, small group, pairs, and individual practice, developing questioning protocols</td>
<td>After-school on September 24th</td>
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<td></td>
<td>Loving the Questions-Incorporating the Question Formulation Technique in Your Classroom</td>
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<td>Grades 5-12: 3:10-4:10pm</td>
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<td>Grades K-4 4:15-5:15pm</td>
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<tr>
<td><strong>Year 2</strong></td>
<td><strong>Meeting #2</strong></td>
<td>K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group, small group, pairs, and individual practice with designing Socratic Seminars; assigned homework to facilitate a Socratic Seminar by the January meeting</td>
<td>After-school on November 18th</td>
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<tr>
<td></td>
<td>Implementing Socratic Seminars</td>
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<td>Grades 5-12: 3:10-4:10pm</td>
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<td></td>
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<td>Grades K-4 4:15-5:15pm</td>
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<tr>
<td><strong>Year 2</strong></td>
<td><strong>Meeting #3</strong></td>
<td>K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group, small group, pairs, and individual practice with the World Cafe’ discussion protocol and debriefing about Socratic Seminar implementation</td>
<td>After-school on January 20th</td>
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<tr>
<td></td>
<td>World Cafe’ Discussion Technique and Reflecting Upon Socratic Seminars</td>
<td></td>
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<td>Grades 5-12: 3:10-4:10pm</td>
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<td>Grades K-4 4:15-5:15pm</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td><strong>Meeting #4</strong></td>
<td>K-5 Instructional Technology Coaches</td>
<td>Whole group, small group, pairs, and individual practice with various Web 2.0 sites and flipped classroom models</td>
<td>After-school on March 16th</td>
</tr>
<tr>
<td></td>
<td>Instructional Technology and Flipped Classrooms</td>
<td></td>
<td></td>
<td>Grades 5-12: 3:10-4:10pm</td>
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<td></td>
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<td>Grades K-4 4:15-5:15pm</td>
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</table>
| Year 2 Meeting #5 | Embodying a Reflective Practitioner and Setting Goals for Next Year | K-8 Supervisor of Curriculum and Professional Development | Whole group, small group, pairs, and individual practice with reflecting upon the Danielson Framework for Professional Practice and setting professional learning goals for the next year | After-school on May 18th
Grades 5-12: 3:10-4:10pm
Grades K-4 4:15-5:15pm |
|------------------|---------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Year 2 Meeting #6 | Attending the Year 3 Teacher Action Research Presentations | Year 3 Teachers | Participation of a gallery walk of Year 3 Teacher Action Research Presentations | After-school on June 8th
All grades: 3:45-4:45pm |

*Table A2. Year 2 Professional Development Sessions; Adapted from Fitzpatrick, Sanders, & Worthen (2011).*
TABLE A3 Year 3 Professional Development Sessions (Novices have an administrator mentor)

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Facilitators</th>
<th>Format</th>
<th>Date &amp; Time</th>
</tr>
</thead>
</table>
| **Year 3 Meeting #1** | What is Action Research?           | K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction | Whole group, small group, pairs, and individual practice to generate action research topics; teachers must have a topic, as well as preliminary research questions and methods by next meeting | After-school on October 1st
|                    |                                    |                                                                              |                                                                        | Grades 5-12: 3:10-4:10pm                 |
|                    |                                    |                                                                              |                                                                        | Grades K-4 4:15-5:15pm                   |
| **Year 3 Meeting #2** | Mid-Year Mid-Year check-in about the project | K-8 Supervisor of Curriculum and Instruction, Assistant Superintendent of Curriculum and Instruction | Whole group, small group, pairs, and individual practice to reflect upon the research process so far and to collectively problem solve any issues; teachers are expected to meet with their mentor throughout the year | After-school on January 21st
|                    |                                    |                                                                              |                                                                        | Grades 5-12: 3:10-4:10pm                 |
|                    |                                    |                                                                              |                                                                        | Grades K-4 4:15-5:15pm                   |
| **Year 3 Meeting #3** | Action Research Presentations       | Year 3 Teachers                                                              | Individual Presentations, teachers choose which format they’d like to present (poster, slideshow, website, etc.). | After-school on January 13th
|                    |                                    |                                                                              |                                                                        | Grades 5-12: 3:10-4:10pm                 |
|                    |                                    |                                                                              |                                                                        | Grades K-4 4:15-5:15pm                   |

Table A3. Year 3 Professional Development Sessions; Adapted from Fitzpatrick, Sanders, & Worthen (2011).
### TABLE A4 Year 4 Professional Development Sessions (Proposed for the 2016-2017 School Year)

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Facilitators</th>
<th>Format</th>
<th>Date &amp; Time</th>
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</thead>
<tbody>
<tr>
<td>Year 4</td>
<td>Danielson’s Domain 4- Contributing to the School Community: How Can You Design PD or a Community Event to Support Student Learning?</td>
<td>K-8 Supervisor of Curriculum and Professional Development, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group presentation about Year 4 project and individual work preliminary designing of what “contribution to the school community” could look like (PD Sessions during District PD days, faculty meetings, “Lunch-N-Learns,” department meetings; Parent Information Nights, events/assemblies to promote positive school culture, etc.)</td>
<td>September 2016</td>
</tr>
<tr>
<td>Meeting #1</td>
<td>K-8 Supervisor of Curriculum and Professional Development, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group presentation about Year 4 project and individual work preliminary designing of what “contribution to the school community” could look like (PD Sessions during District PD days, faculty meetings, “Lunch-N-Learns,” department meetings; Parent Information Nights, events/assemblies to promote positive school culture, etc.)</td>
<td>September 2016</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Mid-Year Check-in about project</td>
<td>K-8 Supervisor of Curriculum and Professional Development, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group check-in and collectively brainstorming solution to perceived obstacles; teachers expected to check in with K-8 Supervisor of Curriculum and PD about their progress throughout the year</td>
<td>January 2017</td>
</tr>
<tr>
<td>Meeting #2</td>
<td>K-8 Supervisor of Curriculum and Professional Development, Assistant Superintendent of Curriculum and Instruction</td>
<td>Whole group check-in and collectively brainstorming solution to perceived obstacles; teachers expected to check in with K-8 Supervisor of Curriculum and PD about their progress throughout the year</td>
<td>January 2017</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Presentations</td>
<td>Year 4 Teachers</td>
<td>Gallery Walk/Individual presentations about contribution to the school community (presentation slides, posters, websites, etc.)</td>
<td>June 2017</td>
</tr>
<tr>
<td>Meeting #3</td>
<td>Year 4 Teachers</td>
<td>Year 4 Teachers</td>
<td>Gallery Walk/Individual presentations about contribution to the school community (presentation slides, posters, websites, etc.)</td>
<td>June 2017</td>
</tr>
</tbody>
</table>

*Table A4. Year 4 Professional Development Sessions; Adapted from Fitzpatrick, Sanders, & Worthen (2011).*
Appendix B
Focus Group Guide

**Year 2 Focus Group Questions**

*Directions for Interviewer:* Please follow the bolded script to begin the interview, followed by each question and, if applicable, its’ probes. Transitional sentences are noted in italics.

**Introduction:** Hello, thanks for coming to discuss your thoughts about what life is like as a second year teacher and the induction program. Just a reminder—I will be audio-recording our interview and a transcription will be available if you’d like to review what we discuss here today. To avoid “overlap” when we speak, please pass along the “mic” (phone) to one another. Though our conversation is recorded, it will be confidential. You will receive an alias and your real name will not be mentioned anywhere in the study. To begin, we’re going to discuss your first year of teaching. Do you have any questions?

*Reflecting Upon Teaching Experiences*

*Transition:* This first part of our focus group focuses on your experiences over the past year.

1. Could you tell me a little bit about this second year of teaching compared to your first year?

   Probes:
   - How has your instruction changed, if at all?
   - How’s your confidence this year compared to last year?
   - What were the most important contributors to these changes?

*Teacher Perceptions of Year 1 Professional Development Sessions*

*Transition:* Next, we’re going to specially discuss your views of professional development and Year 1 of the New Teacher Induction program and how the program might have enhanced your instruction and/or boosted your confidence.

2. In the first year induction program we discussed Classroom Culture, I Can Statements, Differentiated Instruction, Mindfulness, and I&RS protocols. Can you talk about how those topics shaped (or not) your practice and your confidence in those areas?

3. Talk about what you carried with you from the induction program last year. Help us all understand why these things “stuck.”

4. What was the most/least helpful about last year’s induction program?

   Probes: Feel free to discuss your mentors, PD topics, coaching cycles, etc.

5. If you could design the curriculum and format for the Year 1 program, what would it include (classroom management, lesson planning, etc.) and why?

*Suggestions for the Robbinsville New Teacher Induction Program*
Transition: Finally, I’d like to hear your suggestions for the Robbinsville induction program.

6. What are some suggestions you have for the Robbinsville induction program?

7. In what ways do you think having a multi-year induction program is beneficial for novice teachers (compared to the traditional one-year induction program)?

Probes:
In what ways do you think having a multi-year induction program is NOT beneficial?

8. Is there anything else you’d like to share?

Closing: Thank you everyone for your honest feedback. If you’d like a transcript of our conversation, please let me know. I look forward to meeting with you again!

Year 3 Teacher Focus Group Questions

Introduction: Hi everyone! Thanks again for participating in these groups-your opinions will help shape future induction program activities. Just a reminder-I will be audio-recording our interview and a transcription will be available if you’d like. To avoid “overlap” when we speak, please pass along the “mic” to one another. Though our conversation is recorded, it will be confidential. You will receive an alias and your real name will not be mentioned anywhere in the study. To begin this session’s interview, we’re going to discuss your second and third year of teaching. Do you have any questions?

Reflecting Upon Teaching Experiences

Transition: This first part of our focus group focuses on your experiences over the past year.

1. Could you tell me a little bit about this third year of teaching compared to your second year?

Probes:
How has your instruction changed, if at all?
How’s your confidence this year compared to last year?
What were the most important contributors to these changes?

Teacher Perceptions of Year 2 Professional Development Sessions

Transition: Next, we’re going to specifically discuss the Year 2 Induction meetings and how they might have enhanced your instruction and/or boosted your confidence.

2. In the second year induction program we discussed questioning protocols, Socratic Seminars, Classroom Technology, and goal setting. Can you talk about how those topics shaped (or not) your practice and your confidence in those areas?
3. Talk about what you carried with you from the induction program last year. Help us all understand why these things “stuck.”

4. What was the most/least helpful about last year’s induction program?

Probes: Feel free to discuss your mentors, PD topics, coaching cycles, etc.

5. If you could design the curriculum and format for the Year 2 program, what would it include and look like?

_Suggestions for the Robbinsville New Teacher Induction Program_

_Transition: Finally, I’d like to hear your suggestions for the Robbinsville induction program._

6. What are some other suggestions you have for the Robbinsville induction program?

7. In what ways do you think having a multi-year induction program is beneficial for novice teachers (compared to the traditional one-year induction program)?

Probes:
In what ways do you think having a multi-year induction program is NOT beneficial?

8. Is there anything else you’d like to share?

_Closing: Thank you everyone for your honest feedback. If you’d like a transcript of our conversation, please let me know. I look forward to meeting with you again!_
How’s your confidence this year compared to last year?
What were the most important contributors to these changes?

Teacher Perceptions of Year 3 Professional Development-Action Research Project

Transition: Next, we’re going to specifically discuss the Year 3 Action Research Project as well as how this year of support might have enhanced your instruction and/or boosted your level of confidence.

2. Can you talk about how the action research project shaped (or not) your instructional practice and your confidence in the classroom?

3. Talk about what you carried with you from the induction program last year. Help us all understand why these things “stuck.”

4. What was the most/least helpful about last year’s induction program?

Probes: Feel free to discuss your mentors, the focus upon action research, etc.

5. If you could design the curriculum and format for the Year 3 program, what would it look like?

Suggestions for the Robbinsville New Teacher Induction Program

Transition: Finally, I’d like to hear your suggestions for the Robbinsville induction program.

6. What are some other suggestions you have for the Robbinsville induction program?

7. In what ways do you think having a multi-year induction program is beneficial for novice teachers (compared to the traditional one-year induction program)?

Probes:
In what ways do you think having a multi-year induction program is NOT beneficial?

8. Is there anything else you’d like to share?

Closing: Thank you everyone for your honest feedback. If you’d like a transcript of our conversation, please let me know. I look forward to meeting with you again!
Thank you for volunteering to participate in my dissertation study about Robbinsville’s New Teacher Induction program. This anonymous survey will help me evaluate the program and its’ influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; you are NOT required to complete this survey. If you are willing to fill out the survey, please review the following consent form (to be included in the IRB documentation) and check the box that says “I agree.” If you do not agree to participate, please click the button that says “I Do Not Agree” and exit the survey. If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

Reflecting Upon the Past Year

This section will be about your experiences as a first year teacher and how they might be similar or different than your experiences as a second year teacher.

1. To what extent has your level of instructional expertise changed from the beginning of last year (when you were a Year 1 teacher) to this year (as a Year 2 teacher)? Please provide examples of how you changed (if at all).

2. To what extent has your level of self-efficacy (the amount of confidence you have in your ability to succeed as a teacher) from the beginning of last year (when you were a Year 1 teacher) to this year (as a Year 2 teacher)? Please provide examples of how you changed (if at all).

Year 1 Professional Development

This section will be about the first year New Teacher Induction program (three days in August and five days throughout the school year).

3. Please check off the sessions (if any) that you feel positively influenced your level of self-efficacy. Self-efficacy is the amount of confidence you have in your ability to overcome various obstacles and be successful in the classroom.

- Classroom Culture and Positive Language
- Objective Writing/I Can Statements
- Differentiated Instruction
4. How did these sessions increase your self-efficacy (confidence in your ability to overcome obstacles and succeed as a teacher) (if at all)?

5. Did you feel comfortable learning about these topics or did you feel some or all of them were out of your comfort zone? Please explain.

6. Which of the following sessions (if any) positively enhanced your instruction?
   - Classroom Culture and Positive Language
   - Objective Writing/I Can Statements
   - Differentiated Instruction
   - Special Education/I&RS
   - Mindfulness/Self-Reflection
   - None of the Above

7. How did these sessions enhance your instruction (if at all)?

8. What topics would you have liked to learn about during Year 1 New Teacher Induction? Please provide any topics you can think of.

9. Do you feel the induction sessions modeled expectations and provided enough examples so that you could successfully apply strategies in your classroom? Please explain why or why not.

10. Do you feel you had enough time or opportunities to try out the session topics in your classroom? Please explain why or why not.

11. Do you feel you were offered enough feedback about your progress through the induction program? Why or why not?

12. On a scale of 1 to 5, with 1=Strongly Disagree and 5=Strongly Agree, please rate the following statement: “Overall, I found Year 1 of the New Teacher Induction program to be a worthwhile experience.”

   1  2  3  4  5
13. Please explain your answer from the question above-why did you choose that particular rating?

**Additional PD Opportunities**

This section concerns additional PD opportunities you might have attended last year.

14. Which of the following PD opportunities have you attended in the last year?

Please check all that apply.

- Morning Shares
- Book clubs
- Out-of-district workshops
- Professional Learning Communities
- Graduate classes
- School-run lunch sessions
- Mentor support
- Professional conversations with content or grade level colleagues
- Professional Discussions with Building Administrators/Supervisors
- Other:

15. Of the opportunities listed above, which one was the most helpful in improving your instruction? Why?

16. Of the opportunities listed above, which one was the most helpful in increasing your confidence? Why?

17. Did you feel you were offered enough PD as a first year teacher? Please check off yes, no, or unsure.
18. What other kinds of PD or support would you like?

19. What are some benefits (if any) of participating in a multi-year induction program?

20. What are some drawbacks (if any) of participating in a multi-year induction program?

21. Would you like to share anything else about the New Teacher Induction program and/or your professional development experiences?

Thanks for your feedback!

New Teacher Induction Program for Year 3 Teachers-Google Forms Survey

Thank you for volunteering to participate in my dissertation study about Robbinsville’s New Teacher Induction program. This anonymous survey will help me evaluate the program and its influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; you are NOT required to complete this survey. If you are willing to fill out the survey, please review the following consent form (to be included in the IRB documentation) and check the box that says “I agree.” If you do not agree to participate, please click the button that says “I Do Not Agree” and exit the survey. If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

Reflecting Upon the Past Year

This section will be about your experiences as a second year teacher and how they might be similar or different than your experiences as a third year teacher.

1. To what extent has your level of instructional expertise changed from the beginning of last year (when you were a Year 2 teacher) to this year (as a Year 3 teacher)? Please provide examples of how you changed (if at all).
2. To what extent has your level of self-efficacy (the amount of confidence you have in your ability to succeed as a teacher) from the beginning of last year (when you were a Year 2 teacher) to this year (as a Year 3 teacher)? Please provide examples of how you changed (if at all).

*Year 2 Professional Development*

This section will be about your participation in Year 2 of the New Teacher Induction program (five PD sessions throughout the school year).

3. Please check off the sessions (if any) that you feel positively influenced your level of self-efficacy. Self-efficacy is the amount of confidence you have in your ability to overcome various obstacles and be successful in the classroom.

- Closed and Open-Ended Questioning Protocol
- Socratic Seminars
- World Cafe'/Debriefing about Socratic Seminars
- Educational Technology
- Mindfulness/Danielson Self-Reflection
- None of the above

4. How did these sessions increase your self-efficacy (if at all)?

5. Did you feel comfortable learning about these topics or did you feel some or all of them were out of your comfort zone? Please explain.

6. Please check off the sessions (if any) that you feel positively enhanced your instruction.

- Closed and Open-Ended Questioning Protocol
- Socratic Seminars
- World Cafe'/Debriefing about Socratic Seminars
- Educational Technology
- Mindfulness/Danielson Self-Reflection
- None of the above

7. How did these sessions increase your level of self-efficacy (your confidence level in your ability to overcome challenges) (if at all)?
8. What are some other topics you would have liked to learn about during the Year 2 Induction meetings?

9. Do you feel the induction sessions modeled expectations and provided enough examples so that you could successfully apply strategies in your classroom? Please explain why or why not.

10. Do you feel you had enough time or opportunities to try out the session topics in your classroom? Please explain why or why not.

11. Do you feel you were offered enough administrative feedback about your progress through the induction program? Why or why not?

12. On a scale of 1 to 5, with 1=Strongly Disagree and 5=Strongly Agree, please rate the following statement: “Overall, I found Year 2 of the New Teacher Induction program to be a worthwhile experience.”

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<tr>
<td>Strongly Disagree</td>
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<tr>
<td>Strongly Agree</td>
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13. Please explain your answer from above-why did you choose that particular rating?

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**Additional PD Opportunities**

This section concerns additional PD opportunities you might have attended last year.

14. Which of the following PD opportunities have you attended in the last year?

Please check all that apply.

- Morning Shares
- Book clubs
- Out-of-district workshops
- Professional Learning Communities
Graduate classes
☐ School-run lunch sessions
☐ Continued mentor support
☐ Professional conversations with content or grade level colleagues
☐ Professional Discussions with Building Administrators/Supervisors
☐ Other:

15. Of the opportunities listed above, which one was the most helpful in improving your instruction? Why?

16. Of the opportunities listed above, which one was the most helpful in increasing your level of self-efficacy, (your confidence level in your ability to overcome challenges and be successful in the classroom)? Why?

17. Did you feel you were offered enough PD as a second year teacher? Please check off yes, no, or unsure.

18. What other kinds of PD or support would you like?

19. What are some benefits (if any) of participating in a multi-year induction program?

20. What are some drawbacks (if any) of participating in a multi-year induction program?

21. Would you like to share anything else about the New Teacher Induction program and/or your professional development experiences?

Thanks for your feedback!
New Teacher Induction Program for Year 4 Teachers-Google Forms Survey

Thank you for volunteering to participate in my dissertation study about Robbinsville’s New Teacher Induction program. This anonymous survey will help me evaluate the program and its influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though one might face various obstacles). Participation is not mandatory; you are NOT required to complete this survey. If you are willing to fill out the survey, please review the following consent form (to be included in the IRB documentation) and check the box that says “I agree.” If you do not agree to participate, please click the button that says “I Do Not Agree” and exit the survey. If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

Reflecting Upon the Past Year

This section will be about your experiences as a third year teacher and how they might be similar or different than your experiences as a fourth year teacher.

1. To what extent has your level of instructional expertise changed from the beginning of last year (when you were a Year 3 teacher) to this year (as a Year 4 teacher)? Please provide examples of how you changed (if at all).

2. To what extent has your level of self-efficacy (the amount of confidence you have in your ability to succeed as a teacher) from the beginning of last year (when you were a Year 3 teacher) to this year (as a Year 4 teacher)? Please provide examples of how you changed (if at all).

Year 3 Professional Development

This section will be about your participation in Year 3 of the New Teacher Induction program (three PD sessions throughout the year and an action research project).

3. Please check off parts of the Year 3 program (if any) that you feel positively influenced your level of self-efficacy. Self-efficacy is the amount of confidence you have in your ability to overcome various obstacles and be successful in the classroom.

- Learning how to conduct Action Research in my classroom
- Conducting research about best practices
- Having an administrator as a mentor throughout the research process
- Presenting my findings to my peers
- Reflecting upon my practice
- None of the above
4. How did the Year 3 Action Research Project increase your self-efficacy (if at all)?

5. Did you feel comfortable conducting action research or did you feel this research was out of your comfort zone? Please explain.

6. Please check off parts of the Year 3 program (if any) that you feel positively enhanced your instruction.
   - Learning how to conduct Action Research in my classroom
   - Conducting research about best practices
   - Having an administrator as a mentor throughout the research process
   - Presenting my findings to my peers
   - Reflecting upon my practice
   - None of the above

7. How did the Year 3 Action Research Project enhance your instruction (if at all)?

8. Do you feel the induction sessions modeled expectations and provided enough examples so that you could successfully apply action research in your classroom? Please explain why or why not.

9. Do you feel you had enough time or opportunities to conduct action research in your classroom? Please explain why or why not.

10. On a scale of 1 to 5, with 1=Strongly Disagree and 5=Strongly Agree, please rate the following statement: “Overall, I found my administrator mentor to be helpful throughout the Action Research process.”

11. Please explain your answer from above-why did you choose that particular rating?
12. What other topics would you have liked to learn about during the Year 3 Induction program?

13. On a scale of 1 to 5, with 1=Strongly Disagree and 5=Strongly Agree, please rate the following statement: “Overall, I found Year 3 of the New Teacher Induction program to be a worthwhile experience.”

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<td>4</td>
<td>5</td>
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<tr>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

14. Please explain your answer from above-why did you choose that particular rating?

**Additional PD Opportunities**

This section concerns additional PD opportunities you might have attended last year.

15. Which of the following PD opportunities have you attended in the last year? Please check all that apply.

- Morning Shares
- Book clubs
- Out-of-district workshops
- Professional Learning Communities
- Graduate classes
- School-run lunch sessions
- Continued mentor support
- Professional conversations with content or grade level colleagues
- Professional Discussions with Building Administrators/Supervisors
- Other:

16. Of the opportunities listed above, which one was the most helpful in improving your instruction? Why?

17. Of the opportunities listed above, which one was the most helpful in increasing your level of self-efficacy, or confidence in your ability to overcome challenges? Why?
18. Did you feel you were offered enough PD as a third year teacher? Please check off yes, no, or unsure.

19. What other kinds of PD or support would you like?

20. What are some benefits (if any) of participating in a multi-year induction program?

21. What are some drawbacks (if any) of participating in a multi-year induction program?

22. Would you like to share anything else about the New Teacher Induction program and/or your professional development experiences?

   Thanks for your feedback!
Appendix D
Robbinsville Professional Development Evaluation Forms

**Year 1 Teachers-October Meeting**

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This *anonymous* form will help me evaluate the program and its’ influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). **Participation is not mandatory**; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you **DO NOT** want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

**How many years have you been in education (including time in other districts)?**
1. What did you like best or find the most useful in this session?

2. Which part of the presentation did you find the least useful?

3. This session will improve my confidence in how I implement this strategy/technique in my classroom/instructional setting.

   1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  4-Strongly Agree

4. How do you intend to use what you learned today in your instructional practice?

5. How can the induction program support your implementation of this strategy/technique?
6. What would you like to see happen in the next induction meeting?

**Year 2 Teachers-October Meeting**

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This anonymous form will help me evaluate the program and its' influence upon novice teachers' instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you DO NOT want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

How many years have you been teaching (including time in other districts)?

1. What did you like best or find the most useful in this session?

2. Which part of the session did you find the least useful?

3. This session will improve my confidence in how I implement this strategy/technique in my classroom.

   1-Strongly Disagree    2-Disagree    3-Neutral    4-Agree    5-Strongly Agree

4. How do you intend to use what you learned today in your instructional practice?

5. How can the induction program support your implementation of this strategy/technique?

6. What would you like to see happen in the next induction meeting?
Year 1 Teachers-November Meeting

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This anonymous form will help me evaluate the program and its influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you DO NOT want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

How many years have you been teaching (including time in other districts)?:

1. Can you provide an example of how you’ve applied what you learned in the last session to your instructional practice? If you’re unable to provide an example, please write N/A.

2. Please describe the level of confidence you have in your ability to implement this strategy/technique.

3. In general, how confident are you in your ability to design and implement effective lessons, treatment plans, etc.?

1-Not confident at all  2-Somewhat unconfident  3-Neutral  4-Confident  5-Very confident

4. How can the new teacher induction program better support your implementation of this strategy/technique?
5. How can the induction program better meet your professional development needs?

**Year 2 Teachers-November Meeting**

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- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

**How many years have you been teaching (including time in other districts)?:**

1. Can you provide an example of how you’ve applied what you learned in the last session to your instructional practice? If you’re unable to provide an example, please write N/A.

2. Please describe the level of confidence you have in your ability to implement this strategy/technique.

3. In general, how confident are you in your ability to design and implement effective lessons/treatment plans, etc.?

   1-Not confident at all    2-Somewhat unconfident    3-Neutral    4-Confident    5-Very confident

4. How can the new teacher induction program better support your implementation of this strategy/technique?
5. How can the induction program better meet your professional development needs?

**Year 1 Teachers-January Meeting**

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This *anonymous* form will help me evaluate the program and its influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). **Participation is not mandatory**; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you **DO NOT** want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

**How many years have you been teaching (including time in other districts)?:**

1. Can you provide an example of how you’ve applied what you learned in the last session to your instructional practice? If you’re unable to provide an example, please write N/A.

2. Please describe the level of confidence you have in your ability to implement this strategy/technique.

3. In general, how confident are you in your ability to design and implement effective lessons/treatment plans, etc.?

   1-Not confident at all  2-Somewhat unconfident  3-Neutral  4-Confident  5-Very confident
4. How can the new teacher induction program better support your implementation of this strategy/technique?

5. How can the induction program better meet your professional development needs?

**Year 2 Teachers-January Meetings**

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This **anonymous** form will help me evaluate the program and its influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). **Participation is not mandatory;** if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you **DO NOT** want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

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- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

**How many years have you been teaching (including time in other districts)?**

1. Can you provide an example of how you've applied what you learned in the last session to your instructional practice? If you’re unable to provide an example, please write N/A.

2. Please describe the level of confidence you have in your ability to implement this strategy/technique.

3. In general, how confident are you in your ability to design and implement effective lessons/treatment plans, etc.?
1. How confident are you in your ability to implement this strategy/technique?

1-Not confident at all  2-Somewhat unconfident  3-Neutral  4-Confident  5-Very confident

4. How can the new teacher induction program better support your implementation of this strategy/technique?

5. How can the induction program better meet your professional development needs?

**Year 3 Teachers-October Meeting**

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This anonymous form will help me evaluate the program and its influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). **Participation is not mandatory**; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you **DO NOT** want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

**How many years have you been teaching (including time in other districts)?**

1. What did you like best or find the most useful in this session?

2. What do you wish this session included?

3. This presentation improved my understanding of action research.
   1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

4. This presentation improved my confidence in my ability to conduct action research.
5. What kinds of support do you need to successfully implement action research?

6. How can the induction program better meet your professional development needs?

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This anonymous form will help me evaluate the program and its' influence upon novice teachers' instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program." If you DO NOT want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program." If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

How many years have you been teaching (including time in other districts)?

1. Can you provide an example of how your action research might have influenced your instructional practice/your work with students?

2. Please describe the level of confidence you have in your ability to conduct action research this year.

3. In general, how confident are you in your ability to design and implement effective lessons?

1-Not confident at all 2-Somewhat unconfident 3-Neutral 4-Confident 5-Very confident
4. How can the induction program better support your action research project?

5. How can the induction program better meet your professional development needs?

**Year 4 Teachers-September Meeting**

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This anonymous form will help me evaluate the program and its’ influence upon novice teachers’ instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you DO NOT want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

- I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

- I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

**How many years have you been teaching (including time in other districts)?:**

1. What did you like best or find the most useful in this presentation?

2. What do you wish this presentation included?

3. This presentation improved my understanding of the Year 4 project.
   1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree
4. This presentation improved my confidence in my ability to turn-key my action research.

1-Strongly Disagree  2-Disagree  3-Neutral  4-Agree  5-Strongly Agree

5. What kinds of support do you need to successfully turn-key your action research?

Year 4 Teachers-January Meeting

Thank you for providing feedback about the Robbinsville New Teacher Induction program! This anonymous form will help me evaluate the program and its' influence upon novice teachers' instruction and self-efficacy (the belief that one has the ability to achieve goals and accomplish tasks even though he/she faces various obstacles). Participation is not mandatory; if you want to participate in this study, please check the box next to the statement that says, “I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.” If you DO NOT want to participate, please check the box next to the statement that says, “I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.” If you have any questions, please contact me at tew@robbinsville.k12.nj.us. Thank you!

• I understand that my feedback will be used in an evaluation study of the New Teacher Induction program and that because this feedback is anonymous, there are no potential benefits or risks in sharing my views about the program.

• I do not want my anonymous feedback to be included in the evaluation study of the Robbinsville New Teacher Induction program.

How many years have you been teaching (including time in other districts)?

1. Can you provide an example of how this project might have influenced your instructional practice?

2. Please describe the level of confidence you have in your ability to successfully turn-key your action research.
3. In general, how confident are you in your ability to design and implement effective lessons?

1-Not confident at all  2-Somewhat unconfident  3-Neutral  4-Confident  5-Very confident

4. How can the new teacher induction program better support your Year 4 project?
Appendix E
One-legged Interview Protocols

These informal protocol questions included:

1. I notice _____ from the focus group data and _____ from the survey data, could you help me understand how these two ideas are linked?

2. You mentioned _____ during the focus group, could you elaborate upon that?