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ACCEPTANCE

This dissertation, AN INVESTIGATION OF THE INFLUENCE OF INSTRUCTIONAL COACHING ON RETENTION OF MATHEMATICS TEACHERS, by DOROTHY J. LEWIS-GRACE, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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ABSTRACT

AN INVESTIGATION OF THE INFLUENCE OF INSTRUCTIONAL COACHING ON RETENTION OF MATHEMATICS TEACHERS
by
Dorothy J. Lewis-Grace

In 2007, the National Center for Education Statistics (NCES) reported in their 2004-2005 Teacher Follow-up Survey that nearly 20% of U.S. teachers leave the profession after their first year of teaching and almost 30% leave after the fourth year of teaching. These percentages are even greater for mathematics teachers. The inability of schools to retain teachers is the largest contributor to the perceived teacher shortage (Kardos, 2004). Research suggests that teachers who began teaching with a sense of a calling and commitment will remain in teaching. Using symbolic interactionism, adult learning, and partnership as a theoretical framework, this ethnographic case study investigated and examined the factors that influenced second-career mathematics teachers to remain in the teaching profession and their experiences with instructional coaching. The following guiding research question and sub-questions were pursued in the study: Why have four second-career mathematics teachers remained in their role for 5 or more years? What are the teachers' experiences with instructional coaching? How would they describe coaching? Which aspects of coaching do the teachers find least and most beneficial? How would you improve the coaching program?

A purposeful sampling was used in the selection of participants. The four participants were African-American mathematics teachers; three women and one man. They were chosen because they all are completing their sixth year of teaching. The participants are second-career teachers, and they all have been coached. The research is

based on data collected from teacher narratives, participant observation, photo elicitation, and focus groups. Data were analyzed and categorized as follows: making a difference in a student's life, teacher resiliency, job satisfaction, and support. Data analysis showed evidence of all four factors of retention for one or more of the participants, although the factors have varying degrees of influence. These results indicated that these second-career mathematics teachers have a passion for teaching and are committed to fulfilling their calling. The results also showed a relationship between retention and resilience and support.

AN INVESTIGATION OF THE INFLUENCE OF INSTRUCTIONAL COACHING ON RETENTION OF MATHEMATICS TEACHERS

by
Dorothy J. Lewis-Grace

A Dissertation

Presented in Partial Fulfillment of Requirements for the
Degree of
Doctor of Philosophy
in
Teaching and Learning
in
the Department of Middle-Secondary & Instructional Technology
in
the College of Education
Georgia State University

Atlanta, GA
2011

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TABLE OF CONTENTS

List of Tables v
List of Figures vi

Chapter
1 INTRODUCTION..... 1
Statement of the Problem 5
Rationale for the Study..... 6
Research Questions..... 7
Definition of Terms..... 8
Subjectivities Statement..... 9
Outline of the Study..... 10

2 LITERATURE REVIEW..... 12
Teacher Attrition..... 12
Teacher Retention..... 16
Mentoring..... 20
Instructional Coaching..... 24
Professional Development..... 30
Summary..... 31

3 THEORETICAL FRAMEWORK..... 34
Symbolic Interactionism..... 34
Partnership..... 38
Adult Learning..... 41

4 METHODOLOGY..... 43
Research Setting..... 46
The Role of the Researcher..... 47
Participants..... 49
Data Collection..... 50
Individual Narratives..... 50
Focus Groups..... 52
Participant Observation..... 55
Photo Elicitation..... 55
Data Management and Analysis..... 56
Frames for Analysis..... 58
Confidentiality and Ethics..... 58
Guidelines for Interpreting and Reporting Findings..... 59

5 FINDINGS..... 61
Participant Profiles..... 64
Meet Cynthia: *The Scholar*..... 64
Meet Jill: *The Inspirer*..... 65
Meet Jonathan: *The Problem-Solver*..... 67

Meet Victoria: *The Resolver*…….. 68
Themes of the Factors of Retention……... 70
Theme 1: Making a Difference…….. 71
Theme 2: Teacher Resiliency…… 74
Theme 3: Job Satisfaction…….. 77
Theme 4: Support…….. 79
Teachers' Experiences with Coaching…….. 81
Theme 1: Support as a Resource……... 81
Theme 2: Support as a Guide…… 83
Theme 3: Support as Personal Growth…….. 85

6 SUMMARY AND DISCUSSION…… 89
Interpretation of Findings…….. 96
Making a Difference…….. 97
Teacher Resilience……. 99
Job Satisfaction…….. 103
Support……... 105
Participant's recommendations…….. 108
Implications and Recommendations…….. 110
Leaders of Districts and Schools……... 110
Instructional Coaches and Mentors……... 111
Policymakers……. 112
Recommendations for Future Research……. 114
Closing Remarks…… 114

References ……. 116

Appendixes …… 130

LIST OF TABLES

Table		Page
1	Summary of Study Participants……	64

LIST OF FIGURES

Figure		Page
1	Emerging Themes……	70
2	Victoria's Image of Support as a Resource…….	82
3	Jonathan's Image of Support as a Resource……	82
4	Victoria's Image of Support as a Guide……..	83
5	Jill's Image of Support as a Guide……..	84
6	Victoria's Image of Support as Professional Growth……..	85
7	Jill's Image of Support as Professional Growth……...	85
8	Cynthia's Image of Support as Professional Growth……	85

CHAPTER 1

INTRODUCTION

Although I have always wanted to teach in a public school, I actually began my instructional career in the military. During the first 10 years of my professional career, I served as an Aircrew Life Support Specialist in the United States Air Force. My primary responsibility was to teach the fighter pilots on how to use their survival equipment after ejection from their aircraft. While conducting the training session, I thoroughly enjoyed teaching skills that, when effectively used, would translate into success. Even though, my work was meaningful, I still desired to see students in public schools attain this same level of success. Because I already had a degree in mathematics, I began to take education courses that would provide certification.

Entering the teaching profession from the military was very exciting for me because I was finally a teacher in a public school. However, I noticed that some of my new colleagues did not share in my delight. Each year, at least one of the new mathematics teachers left the profession. Teachers either left for personal reasons, to travel abroad, or to enter other career fields. As I reflect on those times, I remember that the new teachers were left alone in their classrooms. They received little or no support from the administrators. I wonder, had they gotten support, would they have stayed? The rate of teacher turnover troubled me because I saw the great need for students to have effective mathematics teachers. The effectiveness of a department wanes when there lacks consistency of it members. Therefore, I wanted to find ways to support the new teachers while maintaining my teaching load.

During the latter years of my teaching career, I supported and assisted the new teachers in managing their classes by giving them ideas to engage the students. The new teachers sometimes observed my instruction to gather other instructional practices. I provided the new mathematics teachers with ideas for games, manipulatives, lessons that had been proven to be effective, and how to use graphing calculators. Some of the new teachers observed my instruction in class; they often returned to their class to try the strategy. My quest to support new mathematics teachers ultimately resulted in my desire to become an instructional mathematics coach.

As I have supported new teachers, it was troubling to read about the high teacher attrition and low teacher retention rates. I wondered if there was any empirical research regarding teacher turnover rate and instructional coaching. Darling-Hammond (2003) states since the early 1990s, the annual number of teachers leaving the teaching profession has been greater than the number of teachers entering the profession; this pattern puts enormous pressure on the nation's hiring systems. The high turnover of teachers in schools not only causes high attrition rates but also negatively affects the school environment and student performance. The constant turnover of teachers makes it difficult to establish consistency and continuity in the school environment and student performance. Teacher retention is a persistent problem in school improvement and student achievement. The large number of teachers leaving the profession eventually diminishes the overall capacity of a school to educate its students. Research shows that a highly effective teacher workforce is the single greatest factor for assuring student achievement (Berry, 2004; National Commission on Teaching and America's Future, 1996).

Some urban schools suffer from turnover rates that are 20% to 50% higher than those of affluent schools (Ingersoll, 2001). Statistics show that smaller schools and urban schools that serve high-poverty populations are particularly at risk of losing teachers (Marvel, Lyter, Peltola, Strizek, & Morton, 2007). Jacob (2007) defines an urban school as one that is located in a large central city. And oftentimes, urban schools are characterized by high rates of poverty.

Ingersoll and Smith (2003) argue that nearly 40% to 50% of all beginning teachers leave the profession within the first 5 years of their career. These teachers cite things such as job dissatisfaction and lack of support from administrators as major reasons for leaving. New educational conditions, goals, and reforms are compounding what is already a complex professional challenge for the new teacher (Inman & Marlow, 2004). At the same time, teachers continue to experience lower rates of job satisfaction caused by many factors, including "a general lack of support for teaching as a profession," (Zeichner, 2003, p. 494), poor working conditions, and low salaries.

Learning to teach is a difficult but rewarding job. At a training session with other instructional coaches one Friday morning, I heard one coach say: "This is a difficult time for new teachers. We have all these reforms, assessments, and accountability pieces." Then, there is a great deal of on-the-job training that a new teacher encounters. These beginning teachers arrive at the school with motivation and a strong desire to teach. However, they soon fall victim to the anxiety, insecurity, and frustration of trying to juggle lesson plans, managing student behavior, pacing a lesson, developing effective strategies for teaching and student learning, analyzing student work, and differentiating to meet every student's needs. These tasks are indeed complex, and it takes time to cultivate

and master these things. Far too many new teachers leave the profession before they have a chance to develop solid teaching skills that will help students reach their potential (Henson, 2008).

Unfortunately, not every teacher has the tools needed to help students be successful in the classroom or to implement systemic reforms. Studies of new teachers from a variety of both traditional and alternative teacher-preparation programs show that many new teachers do not feel adequately prepared to meet the challenges they face when they first begin teaching in their own classrooms (Berry, 2004; Public Education Network, 2003). The traditional program is regarded as the college teacher-preparation program. Teachers who enter the teacher profession through alternative preparation programs are usually second-career teachers. Research indicates that a large percentage of new teachers are second-career teachers with an average age of 36 years (Johnson, Birkeland, Kardos, Kauffman, Edward, & Peske, 2001). Second-career teachers come from various backgrounds, such as business management, the military, personnel, and engineering. Currently, a small number of studies have explored second-career teachers' experiences regarding teacher preparation and professional development (Stafford, 2008).

School and district leaders nationwide are beginning to recognize the critical nature of providing sustained and professional support to teachers, especially new teachers, as a means of maintaining a strong, stable workplace and improving measurable outcomes for student learning (Berry, 2004; Johnson, Berg, & Donaldson, 2005). Many districts have assigned a mentor to their new teachers. Thirty states now *require* mentoring for new teachers (Martin, 2008). Despite the school districts' efforts, teacher attrition is still occurring at alarming rates. The National Commission of Teaching and

America's Future (NCTAF, 2007) found that teacher attrition has increased by 50% over the past 15 years, and the national teacher turnover rate has grown to 16.8%. More problematic is that their findings state that the teacher attrition rate approaches 20% in urban schools (NCTAF, 2007). Teacher attrition impacts student achievement, fiscal management, and teacher effectiveness. During the past 20 years, there have been several studies conducted that seem to support the claim that well-designed and well-structured teacher mentoring and induction programs are successful in increasing teacher retention (Ingersoll & Smith, 2004), but retention rates are still low. This is why it is important for districts to examine other interventions to increase teacher retention.

Statement of the Problem

Every year, the state of Georgia needs approximately 15,000 new teachers (Teacher Retention, 2008); yet, Georgia loses 33% of its new teachers during the first 5 years (Henson, 2008). Many students in urban schools have only a 50% chance of being taught by qualified teachers (Bartell, 2005). Despite attempts to support new teachers through mentoring and induction programs, teacher retention rates are still too low, especially in urban and rural schools (Spencer-Ado, 2009). Ingersoll and Kralik (2004) found that well-functioning supports are beneficial to new teachers. However, many of these supports do not function as intended (Andrew, Gilbert, & Martin, 2006). Moreover, mentoring and induction programs frequently end as the first year of teaching draws to a close (Ingersoll & Smith, 2004), despite recommendations that such supports continue through the first 3 years (Feiman-Nemser, 2001; Kaufman, 2004).

This lack of appropriate support, combined with the challenges that new teachers face, contributes to the teacher attrition and retention problem. Therefore, school districts

should explore other interventions that may help to retain new teachers and improve student achievement. In order to provide other possible interventions for teacher retention, this research investigated the influence of instructional coaching on the retention of mathematics teachers.

Rationale for the Study

Research has cited numerous reasons why teachers leave (Darling-Hammond, 2003; Smith & Ingersoll, 2003; Inman & Marlow, 2004; Berry, 2004). However, there is limited literature on why teachers have remained and even less on why mathematics teachers have stayed in the classroom. Instructional coaching has become a part of many district's instructional program (Neufeld & Rope, 2003; West & Staub, 2003; Kowal & Steiner, 2007; Knight, 2007). Georgia has spent millions on its coaching program (Georgia.gov) and Boston has spent almost $6 million on its coaching program (Neufeld, 2003). With this investment being made, it is worth exploring if instructional coaching has been a factor of second-career mathematics teachers remaining in their teaching role.

There is reason to believe that instructional coaching might be a factor because Bolan (1995) found that the degree to which newly hired teachers are supported and assessed in their initial years of teaching can determine whether they remain in teaching and whether they are able to continuously develop their knowledge, skills, and dispositions (Darling-Hammond, Berry, Haselkorn, & Fideler, 1999, p. 184). The types of learning and support experiences new teachers have are said to influence their willingness to stay in teaching or underscore their decision to leave teaching.

My research provided a forum for new teachers to voice their reasons for remaining in their role of teaching and experiences with instructional coaching. Data

were analyzed and categorized as follows: making a difference in a student's life, teacher resiliency, job satisfaction, and support. Data analysis showed evidence of all four factors of retention for one or more of the participants, although the factors have varying degrees of influence. These results indicated that these new second-career mathematics teachers have a passion for teaching and are committed to fulfilling their calling. The results also showed a relationship between retention and resilience and support.

Research Questions

The primary research question was "Why have four second-career mathematics teachers remained in their role for 5 years?" This question illuminated their reasons for remaining in the profession. I also investigated what role does instructional coaching play within the context of teacher retention. The secondary research questions were:

1. What are these teachers' experiences with instructional coaching that they have received during the period of 2005 to 2010?
2. How would these teachers describe coaching?
3. Which aspects of coaching do the teachers find most beneficial to their teaching?
4. What aspects of coaching do the teachers find least beneficial to their teaching?
5. What recommendations do the teachers have toward a more productive and beneficial coaching program?

Definition of Terms

The terms used in the study and their definitions are as follows:

Alternative teacher program: Accreditation programs designed to allow individuals with a significant subject-area background to complete their teacher-preparation education while teaching full time.

Attrition: The situation that occurs when K-12 public school teachers begin teaching public school one school year, stop teaching public school during or at the end of that school year, and do not return the following school year.

Induction: Various programs and activities used to help new teachers transition into teaching.

Instructional coach: Someone whose primary professional responsibility is to bring practices that have been studied using a variety of research methods into classrooms by working with adults rather than students.

Mentor: A tenured teacher who has been partnered with a new teacher to help him or her become accustomed to the classroom and the policies of the school where he or she works.

New teacher: An individual who has been in the teaching profession between 0 to 5 years.

Second-career: An individual who has moved from one established career into teaching.

Teacher retention: The proportion of teachers in one year who are still teaching in the same school the following year.

Teacher turnover: The rate at which teachers exit schools; it consists of both teacher migration (movers: those who transfer or migrate to teaching positions in other schools) and teacher attrition (leavers: those who leave teaching altogether).

Subjectivities Statement

I recognize the subjectivities present for this study due to the fact that I am both the researcher and the instructional mathematics coach of the participants in this study. I have coached these four second-career mathematics teachers (referred to as "the participants") for 5 years. One of the participants, Cynthia, is a 35- year- old African-American whose former career was in industrial engineering. Jill, a 40-year-old African-American, was an engineer for 12 years before deciding to teach. The only African-American male participant, Jonathan, is a 40-year-old former electrical engineer of 15 years. The fourth participant in the study, Victoria, is a 35-year-old African-American whose former career was in interning and tutoring before she became a teacher.

As their instructional mathematics coach, I have supported these teachers in their teaching efforts by demonstrating and modeling instructional strategies and lessons. I have observed the teachers' instruction and given them feedback. Through co-planning lessons and co-teaching with the teachers, I was also able to promote teacher self-reflection. Although I feel the interaction with my teachers is mostly effective, I have no real data to support my belief. When I began coaching these new mathematics teachers 5 years ago, exploring their decision to remain in teaching was not my goal. My study seeks to better understand the experiences that the participants had with instructional coaching to possibly illuminate why they have remained in the teaching profession for 5 years.

One of my subjectivities is that the problem of teacher retention is very personal to me because as a former mathematics teacher, I watched new teachers leave year after year. Being a new teacher myself several years ago, I often wondered about the lack of support for me and my colleagues. We all needed someone to guide and teach us. In this study, I have been with the participants, and I know for a fact that they have received support because they were with me.

Another subjectivity that is present for me in this study is that I am also a second-career teacher. As I stated in the introduction, I spent the first 10 years of my professional career in the military. My participants and I share those commonalities. However, their reasons for remaining in teaching may contrast with my belief that a new teacher needs ongoing support that an instructional coach can provide. My personal views about supporting new teachers must be bracketed so that the teachers' voices are heard.

Outline of the Study

Chapter 1 provide the reader with the background and introduction of the study including the problem statement, the study rationale, the primary and secondary research questions, definitions of terms, and the subjectivities statement. Chapter 2 highlights the literature that addresses the problem of new teacher retention, especially mathematics teachers. Here, I provide a review of related literature on teacher attrition, factors that contribute to teacher attrition such as lack of support, job dissatisfaction, and student discipline. Factors for teacher retention such as mentoring and induction programs, and professional development are also discussed in this chapter. Instructional coaching is also included in Chapter 2. Chapter 3 explains the theoretical framework for the study. Symbolic interactionism, partnership, and adult learning theories will form the frame for

this study. Chapter 4 reveals the methodology of the study, including the researcher's role, the research design and instruments used to collect, analyze, and interpret the data. Chapter 5 introduces the profiles of the participants and it includes the findings from the study. Themes on the factors of retention for these participants are addressed and their experiences with instructional coaching are illuminated in this chapter. Finally, the study culminates with an interpretation and discussion of the findings. Implications and recommendations of the research are also discussed.

CHAPTER 2

LITERATURE REVIEW

In this chapter, through a review of recent literature, I demonstrate that there is a limited amount of research on the retention of new secondary-mathematics teachers and their experiences with instructional coaching. As I considered studying retention of mathematics teachers, I concluded that it would be important to ascertain why teachers are leaving the profession and what interventions have been put in place to retain teachers. Although there is a lack of research on the influence of instructional coaching on retention, I have included current literature on instructional coaching. The review is divided into four sections: (a) teacher attrition, (b) teacher retention interventions namely mentoring, (c) instructional coaching, and (d) professional development. I conclude the chapter with a summary of the literature that clearly demonstrates that much research has been conducted concerning teacher attrition and retention of teachers in general; however, there is a great need for research on retaining mathematics teachers.

Teacher Attrition

Each time a new teacher enters a school, an adjustment period is required. Teacher turnover always imposes training, interviewing, and productivity costs on an organization. In the educational system, turnover can also compromise student learning (Kukla-Acevedo, 2009). Teachers generally need 5 years of experience before becoming fully effective at improving student performance (Rivkin, Hanushek, & Kain, 2005). The national attrition rates for beginning teachers average 30% during the first 3 years of teaching (Ingersoll & Smith, 2003). Those percentages are supported by other studies. Darling-Hammond (2000) stated approximately 30% of new teachers leave within the

first 5 years. She also clarified that the attrition rate of teachers who completed an alternative teacher-preparation program is closer to 60%. In 2004, Smith and Ingersoll reported that new mathematics teachers were 10% more likely to leave teaching at the end of their first year of teaching than teachers in other subjects. This statistics evokes the question: Why are new mathematics teachers leaving early?

The Interim Status Report (2007) for Georgia Professional Standards Commission reported that the new teacher attrition rate was 11% for first year teachers, 28% for 3rd year teachers, and 41% for 5th year teachers. With this rapid growth of attrition, there is a recognized need to investigate factors that cause new teachers to leave, especially new mathematics teachers, and the factors that affect the retention of new mathematics teachers. In discussing these factors of attrition, I will examine what has been done to improve teacher retention. Studies pertaining to new teacher attrition have found a variety of factors that cause new teachers to leave the profession. Darling-Hammond and Sykes (2003) reported that more than half of all teacher attrition is due to job dissatisfaction. According to Inman and Marlow (2004), many teachers leave the teaching profession after they become disillusioned. They state that many teachers believe that educators are not accorded the prestige and authority they feel like they deserve. Performing hall, bus, and lunch duty and having to schedule restroom breaks are factors of teaching that they feel lead to job dissatisfaction. Robertson et al. (2006) discussed reasons why teachers become disenchanted with the administrative support and eventually leave the profession. Robertson and colleagues (2006) conducted a survey of 53 new teachers regarding factors that influenced these new teachers' satisfaction or dismay with their jobs. The surveys were followed up with in-depth focus groups and

personal interviews of 35 of the teachers. The findings revealed that classroom management, paperwork, and personal time management were vital areas of concern of these teachers surveyed. The findings also showed that there was a disconnection between what the new teachers envisioned teaching would be and what really happened once they became teachers. This discontinuity contributed significantly to their dissatisfaction with teaching and administration. Direct communication and support from a supervisor, principal, or other administrator diminish the stress period (van Dick & Wagner, 2001). A link between administrative support and teacher attrition has also been demonstrated. Specifically, teachers are less likely to quit schools when they feel supported by their administrators (Ingersoll, 2001). Studies show a positive link between administrative support and teacher outcomes (Kukla-Acevedo, 2009).

While it is true that teachers leave the profession for many reasons, a 2001 National Center for Education Statistics (NCES) survey of public and private schools found that 38% of those teachers who left the profession attributed their leaving to "dissatisfaction with administrative support" and 32% left due to "workplace conditions." The teachers in this survey did not feel supported by their administrator, nor did they feel a strong connection to their colleagues. The "workplace conditions" are defined by researchers such as Darling-Hammond and Ingersoll (2003) as "administrative support, student behavior, decision-making roles, parental support, amount of paperwork and meeting duties, and control in classrooms." Ingersoll (2001) explained that the largest rate of attrition is by new teachers who were dissatisfied with their working conditions and their lack of time to prepare for daily classroom instruction. Fredericks (2001) and

Johnson and Baldacci (2006) reported the lack of administrative support as a primary reason for such high attrition rates among new teachers.

Other research revealed that teachers also leave because of salaries, working conditions, preparation, and lack of mentor support in the early years (Darling-Hammond, 2003). Ingersoll and Smith (2003) reported that 19% of beginning teachers said that they left due to school staffing action; many times, new teachers were given the most challenging classes. Another 42% cited personal reasons such as pregnancy, relocation, and marital status change, while another group of teachers cited job dissatisfaction. When teachers were asked about their job dissatisfaction, more than 75% linked their quitting to working conditions. These working conditions were "lack of support" and "student discipline problems."

Prior studies have revealed that student behavior is linked with negative teacher outcomes. Students' behavioral challenges are a major cause of stress among teachers (Abel & Stewell, 1999), and these challenges also contribute to feelings of job dissatisfaction (Stockard & Lehman, 2004; Voke, 2002). In a study of new teachers in Philadelphia, Useem (2003) found that 52% of the third-year teachers who were planning to leave cited "dissatisfaction with student behavior" as the primary factor contributing to their desire to leave. For these teachers, it seems that student behavior inhibited them from deriving the psychic rewards they sought; therefore, there was not enough incentive to stay.

Other studies show that teachers who majored in mathematics, and especially secondary teachers, are more likely to leave (Murnane et al., 1991). Scholars hypothesize that the high exit rates of these teachers are due to increased alternative opportunities

available to people with mathematics and science knowledge and skills (Kukla-Acevedo, 2009). Many mathematics teachers in this generation are second-career teachers. According to a study conducted by Johnson and Baldacci (2006), 48% of their participants entered teaching at the mid-career level. Given the career options and lack of long-term commitment to teaching that characterize the next generation of teachers, schools and districts will need to listen and take heed to what these teachers say they want, which is support (Johnson & Baldacci, 2006).

There is a substantial body of literature that examines the factors affecting teachers' reasons for leaving the profession. The above literature can be categorized by some common themes for the high attrition rate of new teachers: job dissatisfaction, lack of support and workplace conditions, and student discipline. It should also be noted from the literature that there is a link between teachers' job dissatisfaction and workplace or working conditions. The teachers' job dissatisfaction is usually the result of external factors of the school.

Teacher Retention

As I study why teachers leave the profession, it is important to ascertain the factors that influence new mathematics teachers to stay. Although 50% of new teachers in American urban schools leave the profession in the first 5 years of teaching, 50% remain (Darling-Hammond, 2003; Wong, 2003). According to the Interim Status Report (2007), in Georgia, only 9.6% mathematics teachers left the profession, which is a statistic worth investigating. What influenced the remaining teachers' decisions to remain?

Research by Singh and Billingsley (1996) indicated that job satisfaction had the strongest direct positive effect on a teacher's decision to remain in the teaching

profession. More recent research by Holloway (2003) listed professional development, ongoing mentoring, resiliency and empowerment, and sustained support as reasons why teachers remain in the classroom. Because of the challenges of the classroom and its stressful nature, a teacher needs *resiliency*, or the ability to adapt and bounce back when faced with upsetting or stressful conditions (Bernshausen & Cunningham, 2001). When teachers become resilient, teacher retention is at its highest because teachers are competent, feel like they belong, and feel useful (Holloway, 2003). Bernshausen and Cunningham (2001) suggest that teachers must be taught how to be resilient, and without this trait, teachers are more likely to leave. They also suggest that high attrition rates, stress levels, and burnout in education indicate an inadequate source of support for new teachers (Bernshausen & Cunningham, 2003). This finding supports my belief that teachers need the ongoing support that an instructional coach can provide.

In What Keeps Teachers Going?, Sonia Nieto (2003) based her book on a yearlong study of group sessions with seven urban experienced teachers. Each theme of the book illustrated the stories of these teachers. Nieto used themes such as teaching as evolution, teaching as love, teaching as hope and possibility, and teaching as shaping futures as a lens to understand why teachers persevered in spite or seemingly insurmountable challenges. Nieto used personal narratives to illustrate how teaching experiences are "part of the larger context in which education takes place" (p.9). She stated: "It is only through reflection on… [the evolution of teaching] that we can understand our motives, aspirations, and even success or failure as teachers" (pp.9-10). Her final suggestions were to redesign professional development and support those teachers who love their students and love teaching.

As new teachers continued to leave the classroom, it was important to Inman and Marlow (2004) to identify the factors that caused teachers to remain in the profession. They argued that if the teacher shortage was going to be remedied, it was important to understand why teachers stayed in the profession. The purpose of their study was to examine the attitudes of new teachers in order to identify the perceived positive aspects of teaching. Inman and Marlow (2004) randomly surveyed teachers from schools in Georgia. They used the Professional Attitude Survey, a 10 item survey instrument, which gathered information about teacher career stability. This tool asked teachers to respond to questions that covered demographics, teacher background, reasons for remaining in the profession, and job satisfaction.

Inman and Marlow (2004) classified the beginning teachers in two phases: teachers who had 0 to 3 years of experience were labeled as Phase 1 teachers; those who have been teaching for 4 to 9 years were labeled as Phase 2 teachers. The researchers used the three major classes of factors of retention from The Recruitment and Retention Project (2002). They identified these factors to be external, employment, and personal factors of retention. External factors were listed as alternatives outside of teaching, salary, and retirement incentives; employment factors were described as working conditions, job security, and collegiality.

The findings revealed that both the Phase 1 and Phase 2 teachers cited salary as an external factor for retention. According to the findings, 50% of the Phase 2 teachers cited the employment factors as reasons for their remaining in teaching. Of all the employment factors, job security ranked the highest for the Phase 1 teachers as well as for the Phase 2 teachers. Although the researchers characterized the different types of external and

employment factors of retention, examples of the personal factors of retention were not given.

Other research by Curtis (2005) examined how job satisfaction, collaborative relationships with mentors, teacher self-efficacy, and collective efficacy impacted new teacher retention. Curtis's study was a qualitative and quantitative analysis of data collected from four surveys. The analyses concluded that job satisfaction was the most significant predictor of teacher retention after the first year of teaching. After 5 years, teacher self-efficacy was the most significant predictor. Relationships and collaboration with a mentor was not significant; yet, this finding needs to be investigated because other studies report mentoring as a factor of teacher retention. It would be worthwhile to examine how these teachers were mentored and how often they interacted with their mentor. Holloway (2003) stresses the importance of ongoing mentoring.

Easley's study (2006) also identified and explored the factors of teacher retention among alternative route certification teachers. Easley's study used a single focus group where the participant's dialogues were recorded and analyzed for themes. The researcher used these themes and triangulated them with external data from a related study. The findings revealed that these alternative route certification teachers are drawn to the profession due to their own moral ideals.

A case study of those teachers who left, who had just begun, and who stayed (Thompson, 2007) described the relationship between what kindergarten through eighth grade (K-8) teachers experience in their initial certification programs and their decision to remain in or leave urban schools. The researcher collected data from three different groups of urban teachers. One group represented teachers who were in their first 3 years

of teaching. The second group represented the teachers who had left urban teaching after 3 years. The third and last group was those teachers who had remained for 4 or more years. The methods used were surveys and face-to-face interviews. The findings revealed that all the teachers regarded student teaching as an influential component of the program. For those teachers who remained, it was reported that their reasons for staying was based on motivation they received from their students and the support of their colleagues.

Extant literature shows a direct correlation between the reasons that teachers leave and the reasons why they remain in the profession. If a teacher leaves due to job dissatisfaction, then according to the research, job satisfaction was a significant indicator of retention. The research also showed that in order for teachers to reach a state of "job satisfaction," there are interventions or a host of factors that contribute to that space of satisfaction. As the research indicates, there is a host of factors that coincide to alleviate the problem of teacher retention. The following sections describe the two interventions that school districts are using to alleviate the problem of teacher retention. However, the distinction between mentoring and coaching must be made because the two terms are erroneously sometimes used synonymously.

Mentoring

Mentors describe their roles as taking someone under their wing or showing novice teachers the ropes (Scherer, 1999). Two books, *A Better Beginning: Supporting and Mentoring New Teacher(1999)* and *Coaching and Mentoring First Year and Student Teachers(2007)*, written by Marge Scherer and co-authors, India Podsen and V. Denmark, respectively, also describe the role of mentors. Podsen and Denmark (2007)

suggest that a mentor provides help, support, and guidance that assist the new teachers in developing the necessary skills to enter or continue on their career path. Podsen and Denmark (2007) stated that a central quality of mentoring is that it is intentional nurturing, insightful, and supportive. “For our purpose, teacher mentoring focuses on three goals: (a) helping novices speed up the learning of a new job or skill and reduce the stress of transition; (b) improving instructional performance of new teachers through modeling by a top performer; and (c) socializing novices into the profession of teaching” (p. 37).

Early literature on mentoring focused primarily on the mentor’s function as a support to the transition and survival of a novice teacher’s first year (Whisnant, Elliot, & Pynchon, 2005). Wang and Odell (2002) conducted a review of mentoring as it relates to learning to teach in reform-minded ways. They found that current mentoring assumptions for teachers (humanistic, situated apprentice, and critical constructivist) all have limitations in developing teacher mentoring into a substantial and effective support for novices learning standards-based teaching. Wang and Odell (2002) suggest that a reconceptualization of teacher mentoring may be required to meet the current reform agenda. Darling-Hammond (1996) defines mentoring as the situation when a veteran teacher is assigned to a novice teacher to help him or her learn the philosophy, cultural values, and established sets of behavior expected by the school in which they are employed.

Odell, Huling, and Sweeny (2000) summarize the qualities of the mentoring and induction programs that they value using eight characteristics. These programs (a) focus on helping new teachers learn to teach in accordance with professional standards; (b) are

responsive to the evolving needs of individual teachers and their students; (c) view becoming a good teacher as a developmental process; (d) view mentoring as a professional practice that must be learned and developed over time; (e) include careful selection, preparation, and ongoing development for mentors; (f) involve experienced teachers as mentors and include mentors in program design and evaluation; (g) are collaboratively planned, implemented, and evaluated by key stakeholders; and (h) are learning to teach. Mentored new teachers tend to focus on student learning sooner and depart from teaching at a much lower rate (NCTAF, 1996).

Studies on mentoring show that it has also been proven to reduce attrition. After surveying urban teachers who had a formal mentoring program, researchers Feiman-Nemser of Michigan State and Haselkorn of Recruiting New Teachers found that retention increased, attitudes improved, feelings of efficacy and control increased, and a wider range of instructional strategies was demonstrated (Feiman-Nemser, 2001). Their report revealed that districts with mentoring programs showed a 7% attrition rate as compared to a national rate of 9.3% of public school teachers within the first year (Staff, 2004). Gold (1999) found that those teachers who were mentored had a slightly higher retention rate than those teachers who were not mentored. Findings from a qualitative study conducted by Morris (2004) revealed that support from administrators, pleasant work conditions, student's intellectual growth, professional development, and mentoring were some of the things that influenced retention.

Darling-Hammond (2000) found that Cincinnati, Columbus, and Toledo in Ohio and Rochester in New York reduced the attrition rates of new teachers by two-thirds by implementing induction and mentoring programs. She also found that teachers

participating in those program "become competent more quickly than those who must learn by trial and error" (Morris, 2000, p. 22). Smith and Ingersoll (2004, p. 702) specifically studied the effects of induction and mentoring on beginning teacher turnover and found that "having a mentor in one's field reduced the risk of leaving at the end of the first year by about 30%." Other research conducted by Dyal and Sewell (2002) reported a 93% increase in the retention rate of new teachers in low-income urban districts for those who participated in induction and mentoring programs.

Studies conducted by Odell and Ferraro (1992) showed that 88% of new teachers remained in the profession as a result of mentoring. Researchers Breaux and Wong (2003) created a mentoring and induction program to alleviate the problem of high attrition. They reported that after 5 years in teaching, 80% of new teachers remained. According to Breaux and Wong (2003), new teachers need an induction program that involves an ongoing, systematic training and support for new teachers throughout their first 2 or 3 years of teaching.

Although the research supports mentoring as an intervention for teacher retention, professional development is not listed as a characteristic of mentoring. Holloway (2003) found that there is a link between the quality and amount of professional development that teachers receive and an increase in their competency. One of the components of instructional coaching is providing teachers with professional development strategies to improve instructional practices.

Instructional Coaching

The concept of coaching is closely related to the concept of clinical supervision (Costa & Garmston, 1994). Coaching can help teachers improve their instructional effectiveness by providing them with feedback on their performance and encouraging them to be more reflective (Pajak, 1993). The activities of the teacher in the classroom are planned by the teacher and coach, and the observational data collected in the classroom provide the grounds for the necessary analysis and reflection. According to Costa and Garmston (1994), coaching is a form of "conveyance," or a metaphorical stagecoach that takes teachers from where they are to where they want to be.

Instructional coaching has not generated a vast amount of research at this point in time (Borman & Feger, 2006). Though the research on instructional coaching is relatively bound, there is nonetheless a much wider body of research with direct relevance to instructional coaching (Borman & Feger, 2006). Instructional coaching grows out of several trends that have been surfacing in research and practice over the past 2 decades. These trends include more emphasis on professional collaboration and development (Borman & Feger, 2006). Knight (2007) describes instructional coaching as a partnership between coaches and teachers. He writes that instructional coaches provide intensive differentiated support to teachers so that they are able to implement research-based strategies (Knight, 2007). These specific components of instructional coaching grew from Knight's (1998) study on professional development. Kowal and Steiner (2007) describe instructional coaching as professional development that improves instructional practices. Instructional coaches may spend time working with groups of teachers, but they set aside

a significant portion of their time to offer classroom modeling, supportive feedback, and specific observations of individual teaching practices.

The initial use and purpose of instructional coaches in my district was very vague. Some principals wanted to use instructional coaches as part of an evaluation process for new teachers. Early on, my duties as an instructional mathematics coach involved pairing up with new mathematics teachers and following the prescribed topics of concern given to me by the principal. This was a very different approach to teacher coaching as compared to that established in several school districts in Los Angeles, according to Griffin, Wohlstetter, and Bharadwaja (2001). From their initiative, Design for Excellence: Linking Teaching and Achievement (DELTA), the coaches and new teachers are able to develop a personalized support plan (Griffin et al., 2001). This new model focuses on support rather than evaluation. The instructional coach is a provider of skills-training, not a supervisor or performance evaluator (Griffin et al., 2001).

As my district gained more insight about instructional coaching, the roles and responsibilities of my position evolved into what became my primary focus, which was to help new teachers with curriculum and classroom management. Instructional coaches typically engage in a wide variety of activities and assume a number of roles (Hall, 2004). Some of my coaching activities were to model instructional strategies and lessons, observe instruction, co-teach, co-plan lessons, provide feedback, analyze student work, conduct study groups, provide professional development workshops, create and administer benchmark tests and monitor results, conduct book purchases and inventories, keep logs of my work, and meet with principals to review the progress of the teachers and myself. Part of my coaching involved being a resource provider and guiding the teachers

in writing effective lesson plans. Classroom management was another area where my experience and knowledge guided the new teachers into finding a style of their own that is effective in managing the class.

Both Delta coaches and new teachers point to psychosocial functions of coaches as being the key ingredient in the coaching process (Griffin et al., 2001). They felt that the personal and emotional support of the coaches was vital to their success. I help my new teachers on a personal level that aids in developing their self-efficacy. A common goal of my teaching and coaching has always been to *reach* the learner before *teaching* the learner. Before I began to coach a new teacher, it was always important for me to establish rapport. My observations of the new mathematics teachers' instruction are used as a diagnostic tool to indicate target areas that need more attention and support.

Content-Focused Coaching, a book by Lucy West, is used to describe a support system for new mathematics teachers that serve as a rigorous system of guiding and supporting teachers as they transform from pre-service education to work (West & Staub, 2003). Content-focused coaching teaches both new and veteran teachers how to best learn, know, and teach mathematics. Through content-focused coaching, I work with my teachers collaboratively to improve their teaching skills and deepen their content knowledge. Through this collaboration, we are able to engage in a dialogue during the pre-conference. At this time, we plan the lesson and decide what role I will take during the lesson. The next stage is the actual lesson, and the last stage is the post conference. Sometimes, the mathematics teacher and I co-teach. Other times, I might model the lesson or observe for a particular concern or component. During our post conference, the discussion is about what went right or went wrong during the lesson. It is a time of

reflection of the teaching and learning process. The support system that West describes is not a fluffy, pampering mentoring approach but a rigorous system of supporting teachers as they make the transformation into teaching (West & Staub, 2003).

Coaches observe, assess, prompt, cajole, encourage, and demonstrate techniques and skills needed by athletes, performers, or teachers to succeed (Bolich, 2001). The opportunity to observe effective teaching and to be observed while one is teaching is invaluable for beginning teachers (Bolich, 2001). After my observation of a mathematics lesson, the new teacher is able to ask me questions and get feedback after the lesson. Beginning teachers that receive coaching indicated that this type of support keeps them energized, passionate, and informed about their field of study (West & Staub, 2003). Podsen and Denmark (2007) believe that beginning teachers' confidence relies greatly on the instructional support they receive. Without adequate guidance and support from coaches, principals, and mentors, many new teachers may feel they are left to "sink or swim" early in their careers (Breaux & Wong, 2003).

Being in the classroom with new mathematics teachers increases the likelihood of them using new learning techniques because they are guided by coaching and feel accountable for improved teaching and student learning (Barr, Simmons, & Zarrow, 2003). The on-site professional development that the teachers receive from me allows more observation, learning, and experimentation because it occurs in a real situation. I have experienced the classroom as the natural setting for professional development, as stated by Neufeld and Roper (2003). It allows the focus to be on teaching and learning. This focus promotes the development of leadership skills, professional learning, and

support for teachers that target ways to improve student outcomes (Lyons & Pinnell, 2001).

Coaching has been considered a critical component of a teacher's professional development. Becker (2001) highlights how instructional coaches are on-site developers. The project identified in Becker (2001) investigated the efficacy of classroom coaching in improving instruction in elementary mathematics classrooms, and the coaches in this study were participants in a professional development program. The program included three major aspects: (a) an intensive 3-week summer institute focusing on mathematics content, pedagogical content knowledge, and leadership skills; (b) summer lab schools for children that were organized and run by participants who provide professional development for the team teachers who teach the classes; and (c) comprehensive follow-up activities, including workshops, with leading national and international mathematics educators. This was a qualitative case study that documented how 6 coaches worked with 12 teachers in a 2-year period, from 2000-2001; how coaches interpreted their roles as either collaborator, model, or director; and how coaches affected the teachers that they worked with (Becker, 2001). The findings showed that all the teachers felt supported; however, it did not show or indicate how they grew professionally.

The argument about professional development is that it should be grounded in participant-driven inquiry, reflection, and experimentation (Knight, 2007). The most effective forms of professional development seem to be those that provide ongoing school-based support to classroom teachers in the form of coaches who deal with subject matter content, suitable instructional strategies, and classroom management techniques,

as well as create opportunities for teachers to observe, experience, and try new teaching methods (Knight, 2007).

The ultimate goal of professional development is to facilitate student learning. However, coaching has been used as an intervention to examine literacy achievement in kindergarteners whose teachers had been coached and had participated in professional development (Rennick, 2002). In this quasi-experimental design, Rennick (2002) used a battery of assessments to examine the students' reading and writing abilities. The findings showed significant increases in academic achievement in students whose teachers were coached as compared to those whose teachers were not coached (Rennick, 2002). However, it cannot be totally concluded that the gains were due to coaching. Slinger (2004) repeated this study type but used quantitative and qualitative data. The findings were such as the coaching did not result in any significant increase; however, there was a change in their instructional practices. Specifically, teachers switched from a focus on procedural to instructional, and they had a positive reaction to coaching as a form of professional development (Slinger, 2004).

Desimone and colleagues (2002) drew on longitudinal data from a sample of 200 mathematics and science teachers to conclude that professional development is more effective in changing teachers' practices when it is organized around the participation of teachers and coaches, focused on active learning, and aligned with the teachers' professional knowledge. Whenever I begin to coach a new mathematics teacher, my first approach is to always conduct a needs assessment from an observation and a survey. A personalized plan is then created by the mathematics teacher and me. Given the high level of effort required for teachers to change their classrooms and their need for different

information and scaffolding to succeed, coaching teachers in their own style may be the only viable strategy in many situations (Kise, 2006). Kise (2006) showed how teacher-centered staff development that honored a teacher's strengths, beliefs, concerns, and needs, during change, sets them free to try new avenues for growth.

Thus far, literature on instructional coaching with regard to teacher retention has not emerged. However, the aforementioned literature shows that teacher support is a matter of professional development (Feistritzer, 2001). In addition, Knight (2007) states that instructional coaching is a vital component of professional development, so there is a need for research on how the intervention of instructional coaching may influence teacher retention.

Professional Development

Teacher support is a matter of professional development (Feistritzer, 2001). The ability of school leaders to create a professional culture in which a teacher strives and grows throughout their career is an essential ingredient in ensuring quality teaching in all classrooms by dramatically reducing the staggeringly high rates of teacher turnover (Sparks, 2002). Continued professional development for teachers should be a central component of any retention effort. As professional development should be continuous, its focus should continuously point to the achievement of the students served by the teacher; Renyi (1998) explains that, "professional development needs to focus neither on the individual teacher alone nor district needs, but on the teacher in the context of the school as a whole, and to focus on the school as the unit of work" (p. 71).

An emerging literature base makes it clear that improving teachers' classroom practices has great potential to improve student learning, and coaching is increasingly

being used as a professional development strategy to improve instructional practices (Kowal & Steiner, 2007). NCES (2000) reports that the more time teachers spend in subject area professional development (8 or more hours), the more likely they are to state that their classroom teaching was substantially improved as a result of that professional development. Effective professional development gives new teachers the skills needed to understand and handle behavioral problems and performance standards and to be able to tap into resources to create new lessons.

Researchers who have written about how to improve teaching and student learning recommend changing the traditional structure of professional development. Traditional approaches to professional development are not designed in ways that are likely to help teachers learn what they now need to know (Knight, 2007). Professional development is considered an essential mechanism for deepening teachers' content knowledge and developing their teaching practices (Desimone et al., 2002).

Although literature on professional development is emerging, there is a limited number of studies showing a link between professional development and teacher retention. In most studies, professional development is used in conjunction with different support programs, namely, mentoring and coaching, to help new teachers.

Summary

The literature reviewed in this section explains the factors for high attrition rates. These studies were fairly consistent in reporting why teachers are leaving the profession (Darling-Hammond, 2000, 2003; Ingersoll & Kralik, 2004; Smith & Ingersoll, 2004). The literature supports the common theme of job dissatisfaction and workplace conditions, lack of administrative support, and student discipline as contributing factors to the high

attrition rates of new teachers (Kukla-Acevedo, 2009; Darling-Hammond & Sykes, 2003; Dyal & Sewell, 2002; Inman & Marlow, 2004; Fredericks, 2001; Ingersoll, 2001; Johnson, 2006; McDonough, 2003; Useem, 2003; Abel & Stewell, 1999). The review of the literature also showed that second-career teachers are more likely to leave teaching because of other opportunities available to them (Kukla-Acevedo, 2009).

Several studies indicated that the attrition rates had been lowered due in part to mentoring and induction programs (Darling-Hammond, 2000; Ingersoll, 2004; Dyal & Sewell, 2002; Odell & Ferraro, 1992; Breaux & Wong, 2003). Researchers were also consistent in their hypothesis that mentoring helps increase the retention of new teachers. Various studies (Darling-Hammond, 2003; Holloway, 2003; Bernshausen & Cunningham, 2001) argued that effective and excellent teaching is the key to student success, and effective teachers are, in part, the product of effective induction and mentoring programs. The literature revealed the common themes of teacher retention to be the support and guidance from a mentor (Whisnant, Elliot & Pynchon, 2005; Wang & Odell, 2002; Podsen & Denmark, 2005; Odell, Huling, & Sweeney, 2000; Scherer, 1999).

The literature also presented some important themes regarding the characteristics of instructional coaching. Research (Knight, 2007; Kowal & Steiner, 2007) was consistent in reporting that instructional coaching provides support through professional development. Through this professional development, the focus is on the teaching and learning, which promotes support for teachers. This focus helps teachers target ways to improve student outcomes (Lyons & Pinnell, 2001).

Professional development is a necessary component of any retention intervention. The studies presented in this review all agree that effective professional development

gives teachers the capacity needed to handle different discipline problems, implement new reforms, and learn what they need to know (Knight, 2007; Desimone et al., 2002; NCES, 2000).

CHAPTER 3

THEORETICAL FRAMEWORK

The focus of this study was to understand why four new second-career mathematics teachers have remained in their role of teaching and to explore their experiences with instructional coaching. In this chapter, I introduce the three theories that frame my study: symbolic interactionism, partnership, and adult learning. After a brief history and description of each theory, I discuss the contributions of each of these theories to various studies.

Symbolic Interactionism

A symbolic interactionist orientation toward studying human activity honors the participants as individuals who act based on their personal understanding of the surrounding world (Blumer, 1969). SI is defined as when people act toward things based on the meaning those things have for them; and these meanings are derived from social interaction and modified through interpretation. For example, a teacher in a school may see lunchtime as a time to eat and relax from teaching, whereas the student may see lunchtime as a chance to catch up on sleep, socialize with friends, play video games, or copy homework. A chair may be a place for sitting, but for someone who is moving, it will be a place to stand on or place boxes. Meaning "arises from how the person is initially prepared to act toward it" (Blumer, 1969, p.68-69): "A tree is not the same object to a lumberman, a botanist, or a poet; a star is a different object to a modern astronomer than it was to a sheepherder of antiquity; communism is a different object to a soviet patriot than it is to a Wall Street broker" (p. 69).

Mead's student, Herbert Blumer, expanded Mead's theories into his own writings and created the symbolic interactionist perspectives. Blumer was a devotee of George H. Mead, and was influenced by John Dewey. Dewey insisted that human beings are best understood in relation to their environment (Society for More Creative Speech, 1996). Blumer developed three core principles to his theory: meaning, language, and thought**.** These core principles lead to conclusions about the creation of a person's self and socialization into a larger community (Griffin, 1997). Meaning states that humans act toward people and things according to the meanings that give to those people or things. Symbolic Interactionism holds the principal of meaning to be the central aspect of human behavior. Language gives humans a means by which to negotiate meaning through symbols. Humans identify meaning in speech acts with others. Thought modifies everyone's interpretation of symbols. Thought is a mental conversation that requires different points of view. With these three elements, the concept of the self can be framed. People use 'the looking-glass self': they take the role of the other, imagining how we look to another person (Blumer, 1969). The self is a function of language, without talk, there would be no self concept. People are part of a community, where our generalized other is the sum total of responses and expectations that we pick up from the people around us. We naturally give more weight to the views of significant others.

In his work, Blumer (1969) used SI to study social interaction through participant observation. Blumer argued that close contact and immersion in the everyday lives of the participants are necessary for understanding the meaning of actions, the definitions of the situation itself, and the process by which actors construct the situation through their interaction. Individuals according to Blumer, "are caught up in a vast

process of interaction in which they have to fit their developing actions to one another (Blumer, 1969, p. 20). According to Mead (1934) and to the symbolic interactionists, everything about the human being is considered as process, rather than as stable and fixed (Charon, 1979, p. 30). The individual is not a consistent, structured personality as much as a dynamic, changing actor, never "becoming anything" but always "in the state of becoming" unfolding, acting (Charon, 1979, p. 30). The meaning that individuals give to their experiences and their process of interpretation is essential, not accidental or secondary to the experience itself (Blumer, 1969). People interpret things from their past, writings, families, work, and play.

Symbolic interactionism formed the theoretical framework for a study by Young and colleagues (2005). The focus of the study was to examine how mentors made sense of their work with beginning teachers. The researchers gathered data from the mentors and teachers during interaction. Data collection included gathering open-ended prompts and questionnaires from the participating mentors. The researchers also gathered information about mentoring from the beginning teachers. These teachers were asked to characterize their week using pairs of adjectives, explain successes and failures of their week, and identify insights about themselves or teaching they had gained, and describe their interactions with their mentors during the previous week. The data were analyzed through an iterative process of searching for patterns, themes, and identifying similarities and differences in the mentoring experiences of the participants.

The findings indicated that mentors had preferred personal approaches to mentoring but there were three identified patterns of mentoring from the teachers; responsive, interactive, and directive. These patterns characterized the mentors'

relationships with the beginning teachers. The findings illuminate that there is a tendency for the mentors to withdraw in some measure at mid-year, becoming slightly more distant and disengaged. This may suggest that these mentors may hold the common assumption that learning to teach is ultimately a solitary act. Again, if mentoring is to be effective, it must be on-going. Although, the researchers gathered data from the beginning teachers, they did not indicate in the analysis, whether there was a consistency in what the teachers reported to what the mentors reported. This would have added validity to the self reports and the theoretical frame of the work. This study will influence my work in the manner that I will include my interpretations of my experiences with my new mathematics teachers. Then I will look for similarities and differences between our interpretations.

Symbolic interactionism served as the orienting theoretical framework for Lovin's (2000) study that sought to understand elementary preservice teachers' perspectives of teaching and learning and how these teachers use those perspectives to interpret situations. Case studies of five female elementary preservice teachers were analyzed. Interviews, journal writings, and observations informed the case studies. Findings suggest that while the teachers used course language and ideas, their interpretations or understandings of the ideas were shallow or different from what the teacher instructor intended. Based on the findings, it is suggested that teacher educators should become aware of how their preservice teachers define their current situation. The conclusion from this study is that the teacher educators may assume that the preservice teachers are interpreting the course in one way, which is not aligned with what the teacher educators intended.

These studies that used symbolic interactionism as a frame would facilitate my research because those studies gave voice to the teachers. The experiences of the preservice teachers and mentors informed the reader and helped the reader to understand the meaning they gave to their interactions with others. The commonality in both studies was the qualitative method approach. The two studies collected data by using observations, journal writings, questionnaires, and open-ended prompts. My data collection will be extended to the use of interviews, narratives, photo elicitation, and focus groups.

Partnership

The partnership approach (Knight, 1998) and adult learning (Knowles, 1973) theory will also be utilized in this study. The "*partnership approach*" is the theoretical framework for the instructional coach model. Knight's (1998) theory is grounded in the work of many disciplines such as adult education, psychology, philosophy of science, and cultural anthropology. The ideas of Paulo Freire (1970), Riane Eisler (1988), Michael Fullan (1993), Peter Block (1993), and others are synthesized into seven principles for this theoretical frame: equality, choice, voice, dialogue, reflection, praxis, and reciprocity. These seven principles are a frame for instructional coaching:

1. Equality is recognizing teachers as equal partners and valuing each teacher's thoughts and beliefs.
2. Choice is giving teachers more opportunities to make decisions about their practice and learning (Block, 1993).
3. Voice is giving teachers opportunities to express their point of view.
4. Dialogue is the importance of conversations that enable people to think together.

5. Reflection is that learning can be enhanced when we have numerous opportunities to consider how what we are leaning might impact what we have done in the past, what we are doing now, and what we will do in the future.
6. Praxis is when the partnership enables teachers to have more meaningful experience. Teachers should apply their learning to their real-life practice as they are learning.
7. Reciprocity is all partners benefit from the success, learning, or experiences of others—everyone is rewarded by each individual contribution Freire (1970).

For the initial use of this theoretical framework (Knight, 1998), 73 teachers were trained in visual imagery and self-questioning reading strategies through two different approaches to professional development. Each teacher was trained using the partnership and traditional approach. Using a counterbalanced design, one half of the teachers learned visual imagery using the traditional model and self-questioning using the partnership model. The second group of teachers learned visual imagery using the partnership model and self-questioning using the traditional approach.

This study (Knight, 1998) used a 7-point Likert-type scale to measure engagement, attitudes toward training, and expected implementation. The results revealed significant differences between the partnership and traditional approach. The findings indicated the teachers were more likely to be engaged, enjoy the session, and plan to implement the strategies of partnership approach.

The most current study conducted by Knight and Cornett (2009) was designed to deepen our understanding of the potential impact of instructional coaching. This study

tested instructional coaching as a means of professional development for teachers. Specifically, the purposes of this study were as follows:

1. Investigate the extent to which teachers' use of new strategies could be encouraged through instructional coaching.
2. Determine effects on the quality of use of a new strategy when supported by instructional coaching.
3. Determine if effects of instructional coaching are sustained after termination of instructional coaching supports.

Fifty teachers who were trained on a strategy at a workshop were expected to implement the strategy in class. Teachers were randomly selected from the 50 teachers to either receive help from an instructional coach or receive no support. A second researcher and doctoral fellows interviewed a sample of 22 coached and 17 non-coached teachers. Using a two-way contingency analysis, professional development and observed behavior were found to be significantly related. The proportion of days the strategy was used by the coached teacher and non-coached teachers were 91.5 and 36.2, respectively. The results showed that teachers who were coached by an instructional coach used the strategy more than teachers who just attended the workshop. This study established instructional coaching as an effective means of professional development.

Knight's partnership theory frames my study because my participants and I are partners in this research. My participants and I have been working together for five years, and I consider them equal partners, who all have a voice. Although Knight and Cornett (2009) used a mixed-method design to collect data, I will use a qualitative design to

ascertain more about the aspects of instructional coaching that might have been a factor in these teachers remaining in the profession.

Adult Learning

The framework and processes within which coaching occurs, align with adult learning theory. As in adult learning, working through a goal-oriented, self-directed, and active connection between new learning and life experience, coaching addresses a teacher's need to know and readiness to learn (Griffiths, 2005). Knowles (1973) defines adult learning theory as adult learners being self-directed and displaying a readiness to learn when they have perceived need, and they desire immediate application of new skills and knowledge. Knowles (1980; 1988) set out six key assumptions:

1. Adults are autonomous and self-directed. They need to be free to direct themselves. Their coaches must actively involve adult participants in the learning process and serve as facilitators….guiding participants to their own knowledge rather than supplying them with facts.
2. Adults have accumulated a foundation of life experiences and knowledge that may include work-related activities, family responsibilities, and previous education. They need to connect learning to this knowledge and experience base.
3. Adults are goal-oriented.
4. Adults are relevancy-oriented. They must see a reason for learning something.
5. Adults are practical, focusing on the aspects of a lesson most useful to them in their work. They may not be interested in knowledge for its own sake.
6. Adults need to be shown respect. Coaches must acknowledge the wealth of experiences that adult participants bring to the classroom. These adults should be

treated as equals in experience and knowledge and allowed to voice their opinions freely.

A number of adult learning theories have contributed to the development of the goal-directed coaching framework and processes with which it is applied (Griffiths, 2005). Kolb's (1984) cycle of learning illustrates the cyclic interrelationship between concrete experience, observation, conceptualization and experimentation, as adults encounter meaningful, purposeful and self-directed learning (Skiffington & Zuess, 2003). This occurs in both adult learning experiences and coaching. The work of other adult learning theories (Habermas, 1978; Daloz, 1986; Mezirow, 2000) is also strongly reflected in the coaching process. Habermas (1978) domains of learning can be seen to mirror the outcomes of coaching, as teachers learn new strategies, they develop heightened self-awareness, self-understanding and transformation in terms of shifts in perspective. Similarily, Daloz (1986) explains the importance of providing a vision coupled with the right balance of support and challenge. This is in direct correlation with coaching, which is goal-or vision-directed. Coaching fosters to support through active listening, feedback and encouragement, and creates a challenge through accountability, moving the teacher to reassess assumptions and perceptions (Creane, 2002; Grant, 2001a).

CHAPTER 4

METHODOLOGY

In this chapter, I discuss the methodology of the study. I began by discussing the research designs of the studies that have been conducted to investigate the influence of mentoring on teacher retention. I also discuss the reasons for choosing an ethnographic case study approach, my role as the researcher, and the procedures for selecting the participants. I conclude the chapter with a description of the methods used for collecting, analyzing, reporting the data, frames for analysis, and confidentiality and ethics.

Studies show that new teachers leave the profession after the first two to three years of teaching (NCES, 2000). These new teachers cite many factors for leaving the profession: one of the main factors cited is lack of support from the administration and another main factor is a feeling of isolation (NCES, 2000). Much of the research about teacher retention addresses these factors that cause new teachers to leave the profession. But more importantly, we need to know what is being done to retain new teachers.

In recent years, there has been a growing interest in support, guidance, and orientation programs for new teachers to help them transition into their first teaching jobs (Darlin-Hammond, 2003; Ingersoll & Smith, 2004; Johnson et al., 2005). By the late 1990s, the percentage of new teachers working with a mentor increased from 40% to 80% (Johnson et al., 2005). Induction and mentoring support programs have multiplied in recent years in response to concerns about the struggles faced by new teachers and evidence of increasing turnover rates (Johnson et al., 2005). Induction and mentoring programs have also been implemented in many districts across the nation (Breaux & Wong, 2003). Islip Public Schools in New York, Gaston County Schools in North

Carolina, Manatee County Schools in Florida, Henry County Schools in Georgia, and Santa Cruz County Schools in California are among several school districts that have mandated and implemented teacher induction programs and have seen an increase in teacher retention (Breaux & Wong, 2003). However, much of this research is not conclusive as to how these programs impact teacher retention (Ingersoll & Kralik, 2004).

Quantitative research (Perez, Swain, & Hartsough, 1997; Kapadia, Coca, & Easton, 2007; Rockoff, 2008) has indicated that as a whole, mentoring and induction interventions are critical factors in retaining new teachers. A meta-analysis by Perez, Swain, and Hartsough (1997) studied 214 beginning teachers, asking them to rate the level of effectiveness of 20 frequently used support strategies using a scale from 1 (not at all important) to 6 (extremely important). The results revealed a mean score of 5.0 for lesson observation and conferencing and a mean score of 5.3 for coaching. It is important to note that these beginning teachers did not rate any of the support strategies as "extremely important." There is value in studying those support strategies that beginning teachers did find effective.

Kapadia, Coca, and Easton (2007) also studied how induction influenced new teachers in Chicago Public Schools, including six induction programs for elementary school teachers and new high school mathematics and science teachers. As stated in the literature review, the findings from this study showed that 42% of the high school mathematics and science teachers received weak support from mentors, with no explanations as to why this was the case. The study also failed to indicate whether or not the teachers remained in the teaching profession.

Another quantitative study (Rockoff, 2008) examined the impact of mentoring on new teachers in New York City. The findings showed strong relationships between measures of mentoring quality and teachers' claims regarding the impact of mentors on their success in the classroom. The evidence of effects on teacher retention and student achievement was much weaker.

Research on instructional coaching has emerged in the literature during the past decade (Neufeld & Roper, 2003; Russo, 2004). Nevertheless, there is a lack of literature on how instructional coaching might impact new teacher retention. Interest in the problem of new teacher retention inspired me to study the process of instructional coaching. In order to effectively address this issue, a qualitative case study will be used to explore and understand why have four second-career new mathematics teachers (hereafter referred to as "participants") have remained in the teaching profession for 5 years and their experiences with instructional coaching. A qualitative research paradigm method is needed for this study because it will provide rich, observable data in a natural setting to explore and understand why these mathematics teachers have remained in teaching. This will also be a case study because I seek to understand new teacher retention through an exploration of the experiences with instructional coaching of a specific group of second-career new mathematics teachers.

Since qualitative research is geared toward exploring and understanding certain types of experiences (Creswell, 2002), a phenomenological approach could have been used in this study. To accurately capture the coaching experiences of these participants, whom I have coached for 5 years, an ethnographic approach, used for social science research, was utilized. It relies heavily on up-close, personal experiences and possibly

participation—not just observation—by researchers. My role as the participants' instructional mathematics coach (for the past 5 years) and now as their researcher sufficiently positioned me to participate in the study of the problem. In participant observation, the researcher deeply engages in the life and activities of the participants in the observed setting. The purpose of such participation is to develop an insider's view of what is happening.

The following guiding research question and sub-questions were pursued in this study: Why have four second-career new mathematics teachers remained in their role for 5 years?

Sub-question 1: What are these teachers' experiences with the instructional coaching that they have received during the period ranging from 2005 to 2010?

Sub-question 2: How would these teachers describe the coaching?

Sub-question 3: Which aspects of coaching do the teachers find least and most beneficial?

Sub-question 4: What recommendations do the teachers have toward a more productive and beneficial coaching program?

Research Setting

The school district in which I conducted my study is one of the largest urban districts in Georgia and employs nearly 7,000 teachers. Each school year, the district has a need to hire around 300 to 500 new teachers. At the beginning of each school term, there are approximately two or three new mathematics teachers at the two schools at which I am assigned to coach. One of the schools I am assigned to coach at, School A, is 2.17% White, 89.39% African American, and 2.99% Hispanic. The other school I am

assigned, School B, is 0.08% White and 97.04% African American. The number of students at both schools receiving free and reduced lunches ranges from 75.45% to 79.90%. Both schools are Title I schools, meaning that they are eligible for participation in programs authorized by Title I of Public Law 107-110, the Elementary and Secondary Education Act of 2002 (United States Department of Education).

The participants of this study are second-career secondary mathematics teachers who have 5 years of teaching experience. This 5-year time frame of teaching experience was selected because research indicates that 30% of new teachers leave the profession during the first 5 years of teaching (Ingersoll & Smith, 2003). At the time of the study's inception, there were four mathematics teachers who fell into the 5-year time frame.

The Role of the Researcher

I have 8 years of experience as an instructional mathematics coach and have coached many teachers, which places me in an advantageous position as the researcher. From my personal experiences with new mathematics teachers, I believe that coaching offers significant support for new teachers. As my research explored why the selected participants have remained in the teaching profession, it was found that while instructional coaching is not the only factor for teacher retention, it was one of the reasons why the teachers have remained.

The qualitative researcher is the main instrument for data collection and analysis. In qualitative studies, the researcher is responsible for storing data during the interview process and during data analysis. Merriam (1998) states, "the extent to which a researcher has certain personality characteristics and skills necessary for this type of research needs to be assessed, just as a rating scale or survey form would be assessed in other types of

research" (pp. 20-21). Merriam also states that the researcher should have the following characteristics: tolerance of ambiguity, sensitivity, and good communication skills.

As the researcher, my tolerance for ambiguity has grown considerably throughout my graduate studies, and I enjoy the challenge of a less-structured process that allows me the freedom and flexibility to "search for pieces to the puzzle" (Merriam, 1998, p. 37). Qualitative research also requires the researcher to be sensitive to the biases embedded in this type of research, as this sensitivity is a secondary role of the researcher. As the researcher, I must exhibit a sense of discernment and be sensitive to the participants' nonverbal behavior. My role at this point is to listen to verbal comments and observe nonverbal signs, all while honoring the thoughts and perspectives of each teacher. Finally, the qualitative researcher should be a good communicator, with the ability to relate to the participants, empathize with them, ask good questions, and serve as an intense listener. Only by listening can the good qualitative researcher be fully informed.

A main source of data collection for my study was the group interviews. Merriam (1998) states, "in interviewing it means knowing when to allow for silence, when to probe more deeply, when to change the direction of the interview" (p. 22). However, the interview can be more of a "conversation" with the participants if trust has been established. Serving as the instructional coach of the participants is of benefit to me as the researcher, in that a major component of effective coaching is earning the teachers' trust, which I have done over the past 5 years. I will ask the types of questions that will solicit meaningful information, and I am a good listener. "The purpose of interviewing," writes Patton (2002), "is to find out what is in and on someone else's mind" (p. 341).

Participants

In order to gain accurate and useful information, a purposeful sampling was used in the selection of participants. Purposeful sampling is a nonrandom method of sampling where the researcher selects "information-rich cases" for in-depth study. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term "purposeful sampling" (Patton, 2002). The first criterion for selecting participants is recent or pending completion of the fifth year of teaching. At the time of the study, there was four second-career secondary mathematics teachers completing their fifth year of teaching in two low socioeconomic urban schools in the metro-Atlanta area. The second criterion for selection was for the teachers to have been coached by me.

In this research study, three of the participants are female and one male and they all teach at one of the high schools to which I am assigned. At the time of data collection, I was assigned to only one school. All of the participants are African American. Uniquely, all of my participants are second-career mathematics teachers, and they are my first group of coached teachers. Cynthia, a 35-year-old, worked as an industrial engineer before becoming a teacher. Her mother, grandmother, and great grandmother were all educators. Therefore, Cynthia felt she was destined to teach one day. Jill, a 40-year old, worked in the engineering field for 12 years before becoming a teacher. As a child, her mathematics teachers suggested that she become a teacher but Jill had other plans. Jonathan is a 40-year old former electrical engineer who loves mathematics and decided that he would teach. Victoria is a 35-year-old former intern who wanted nothing to do

with teaching. Each participant has participated and successfully completed the Teachers Alternative Preparation Program (TAPP) in the associated school district.

Data Collection

For this research project, I am both the researcher and the instructional mathematics coach of my participants; being an insider offers certain advantages. The trust and confidence in the researcher-participant relationship has already been formed, and positive rapport has already been established through my instructional coaching experience with the participants early in their teaching careers.

Each teacher received a written consent form with instructions to complete and return it within one week. Study data were collected in the forms of (a) individual narratives, (b) participant observation, (c) photo elicitation, and (d) focus groups over a 3-month time period.

Individual Narratives

My original intent was to use the journal log of the participants. I was under the impression that the participants kept a journal as part of the requirements of the alternative certification program. I was informed by the participants that they did not keep a journal of their first years of teaching; therefore, I relied on the data sources presented in this section.

Narrative as data acquired through research may utilize storytelling, life history, in-depth interview, biography, or focus group (Letherby, 2003). Narrative, an important expression of experiences, derives from a long history of literary tradition and is increasingly being used as a research method. In giving first-person accounts, one is making sense of one's experience and life (Ho, 2005).

The term narrative may relate to both the research method and the phenomenon (Pinnegar & Daynes, 2006) or the phenomenon and the process (Connelly & Clandinin, 1990). Narratives, in essence, are the stories of our lives and the stories of the lives of others. Storytelling is described as a narrative feature in which the individual can tell their story, their way (Holloway & Freshwater, 2007). This is further defined by Denzin (1989, p. 43) as *self-stories*, which are *personal narratives* and contextually specific.

Narrative is also open to interpretation. This interpretation develops through collaboration of the researcher and respondent or storyteller and listener. Subjectivity relies heavily on the use of narrative, as does the importance of the story being told, what has influenced the story, and how the storyteller imposes meaning on their life experiences.

The participants of this study were asked to write an unstructured narrative describing the factors that have influenced their 5-year retention in the role of teaching mathematics. They were also asked to write about challenging situations that tested their resolve to remain in teaching and explain what they did to overcome the situations. I emailed the narrative instructions to the participant's private email and asked them to return their narratives to me electronically in one week. One of the participants took a little longer than a week to write the narrative.

The teachers included their backgrounds and how they became a teacher in their narratives. I analyzed and member-checked the teachers' narratives for similarities and correlation. I looked for evidence of preset categories, such as job satisfaction and support because these themes were present in the literature. While I read and re-read the

narratives, I decided to give each participant a label or title to describe how I saw them through their narratives.

Focus Groups

The primary strategy for data collection came from focus group discussions. Focus groups are a qualitative research method used to obtain opinions, perceptions, attitudes, beliefs, and insight of a small group of people (Kitzinger & Barbour, 1999). Originally, I had planned to conduct multiple individual interviews. However, the dynamics of this group provided a unique understanding of experiences due to age and sex difference among the participants. Focus groups typically involve people with similarities, and giving participants the opportunity to articulate his or her views and hear those of others can lead to new understanding and awareness (Cunningham-Barley et al., 1999). Because my participants are accustomed to collaboration, the group process produced a level of collaboration that would not have been present in one-to-one interviews. According to Morgan (1988), the primary strength of the focus group technique is "the explicit use of group interaction to produce data and insights that would be less assessable without the interaction found in groups" (p. 12).

I used the data from the narratives as a prompt for the first focus group. I prepared an agenda (See Appendix section for the list of preplanned questions) for each focus group. I did member checks (Merriam, 1998) throughout the focus group to ensure that I had accurately captured the meaning and theme of each participant's story. I asked additional questions pertaining to the participant's definition of success because most of them had written about success in their narratives.

The group of participants met at the home of the researcher because it was the most convenient and least intrusive location. The participants met three times to have a audio and videotaped discussion about their reasons for remaining in teaching and their experiences with instructional coaching. Each focus group met for one hour and thirty minutes under the direction of the researcher acting as the moderator. My task as the moderator was to facilitate the discussion to keep the dialogue flowing. I also participated in the discussion when the group discussed their experiences with coaching.

The participants were given their next task after the first focus group ended. The teachers were asked to submit an image or images that depicted their interpretation of instructional coaching. The participants were asked to submit these images to my personal email in a week. Most images were submitted within a few days. After I reviewed the images for meaning and themes, I contacted the participants through their personal email to schedule the second focus group.

The second focus group interview met to discuss the images and their interpretation of instructional coaching. I also used the images to discuss the participant's experiences with coaching. Before the participants arrived, I had taped the participant's and my images on a poster board. The participants were able to view each other's images and give their interpretation of each other's image. They also compared their images to mine. It was interesting to notice how much more relaxed the participants were at this focus group. I member checked by giving the participants a copy of my transcription of the first focus group. As I reviewed the video tape of the first focus group, I noticed how the participants appeared as though they were in a class. Some of the participants were more verbose than others. Although I would ask open-ended questions, some of the

participants would give very short answers. One of the participants was absent from this focus group. However, I was able to include his responses when I member checked at the third and final focus group.

After the second focus group, the participants scheduled the time and date for the last focus group. The objective of the third focus group was to continue the discussion about coaching which included what the participants considered the least and most beneficial aspect of coaching. At the last focus group, I member checked again to evaluate and clarify the themes and my understanding of the teacher's responses.

In the focus group meetings, I asked open-ended questions to solicit deep and rich responses. I monitored the participants' responses and used them to facilitate the discussion of primary themes (Kress & Shoffner, 2007). I used probing comments, observe nonverbal behaviors, and process and explore participants' answers as a means of generating themes related to the participants' responses. Through the use of coding and pattern-matching to help develop themes, I analyzed and compared the themes from the focus group to the themes of the teachers' narratives and photo elicitations.

To increase validity and reliability, data was collected in a triangular fashion, through narratives, photo elicitation, and focus groups. Through this triangulation, used to clarify meaning, verify the repeatability of a theme, and show a correlation or overlapping of themes, I sought to reveal the similarities and correlation of the identified themes.

Participant Observation

When I began to coach these four mathematics teachers, I had no idea that I would have related research interests in the years to come. Yet, my coaching experience has allowed me to be a part of my participants' lives and experiences since the beginning of their teaching career. Although I did not conduct observations for this study, I have observed these teachers in their natural settings for the past 5 years. Therefore, my reflections are first account of the actual experiences.

Participant observation is defined as the researcher being a part of the life and experiences of the people in the observed setting. I mentioned earlier that the purpose of such participation is to develop an insider's view of what is happening. My position as both the researcher and the instructional mathematics coach of these teachers privileged me to share the teachers' reasons for remaining in their roles and to describe their experiences with instructional coaching.

Photo Elicitation

As positivistic quantitative research (Jenks, 1996) often treats participants as "objects" of a study without due consideration of their experience, I decided to use photo elicitation as an instrument to enrich the teachers' stories about their experiences with instructional coaching and to illuminate their interpretation of instructional coaching. The images would ignite a more detailed description of the teacher's experiences and interpretation of instructional coaching. Photo elicitation is a qualitative inquiry approach. It has a long history as a form of inquiry embedded broadly within ethnographic work (Harper, 2002). Stewart (2004) used photo elicitation to study community-based meanings and how they are reflected in local environments and events.

The pictures the participants took facilitated the conversations about the sense of community provided in environments. Photo elicitation differs from interviews in such that participants create images as a means of presenting conceptions. I also decided to use photo elicitation because photographs are assumed to be effective in prompting deeper reflections that words alone cannot (Deppler, Moss, & Agbenyega, 2008).

My participants chose images of their own that depicted their interpretation of instructional coaching. The participants included a caption or explanation of their interpretation. I posit that teachers are creative, responsible, and active and are critical actors in their own learning; therefore, taking and selecting their own pictures gives them more voice and agency (Thomson & Gunter, 2007). Allowing the teachers to generate their own pictures will significantly reduce the power imbalances between me as the researcher and them as the teachers (Brown & Jones, 2001). Departing from my position as the researcher, my biases were reduced and I had a more critical and objective understanding of the teachers' constructed meaning of their experiences with me as their instructional mathematics coach. Clark-Ibanez (2007) argues that researcher-made images may be limited by their own interests and obscure the discovery of important aspects of the research of importance to the participants.

Data Management and Analysis

Organizing and managing data was a concern that was addressed early in the research. Typed notes from the interviews and narratives were stored on a password- and firewall-protected laptop in the home office of the researcher. My advisor and I were the sole viewers and users of these documents. During the study, audio tapes were kept in a

locked file cabinet. Upon completion of the study, the audio tapes will be destroyed in 5 years.

Data analysis is the process of systematically searching and arranging interview transcripts, narratives, and other material that you accumulate to enable one to reveal findings (Bogdan & Biklen, 2003). Merriam (1998) states, "the right way to analyze data in a qualitative study is to do it simultaneously with data collection" (p. 162). She further states that "without ongoing analysis, the data can be unfocused repetitions, and overwhelming in the sheer volume of material that needs to be processed" (p. 162). I considered the 10 suggestions of Bogdan and Biklen (1992) about analyzing data as the data are being collected. They suggest that the researcher force him or herself to make decisions that narrow the study. They also suggest that the researcher plan data collection sessions according to what is found in previous interviews. Each focus group discussion was designed as a follow-up for thoroughness as I coded the concepts and themes found in the previous focus group.

Throughout the different phases of analysis, I searched for patterns, identified similarities, and correlations in the coaching experiences of the participants. A constant comparative data analysis was used to compare the focus group discussions (Denzin & Lincoln, 2003). Data were grouped into small, meaningful units, coded, and grouped together in frequency and description type. Category names were given, such as teacher support or job satisfaction, and they were examined for themes or patterns in the teachers' responses (Denzin & Lincoln, 2003). I read, reread, and recoded the data to ensure trustworthiness.

Frames for Analysis

The three theoretical frameworks that were used as tools to organize and understand the data were symbolic interactionism, partnership approach, and adult learning. The focus of this study was to understand why four second-career new mathematics teachers have remained in the teaching profession for the past 5 years. My position as a symbolic interactionist was to understand and document the why these teachers have remained in teaching. Blumer (1969) believed that in order to understand why the teachers remained in the profession, I would need to understand their constructs about teaching.

Symbolic interactionism is based on three fundamental premises: (a) human beings act toward things on the basis of the meanings that the things have for them; (b) the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows; and (c) meanings are handled in and modified through an interpretative process used by the person in dealing with the things he encounters (Blumer, 1969, p. 2). Based on these premises, data were sought that allowed me to understand how the study participants interpret their experiences with instructional coaching and how those experiences were a factor in their remaining in the profession.

I also analyzed the data using Knight (1998) "partnership" approach and Knowles (1973) adult learning theory. These frames are discussed in the summary section.

Confidentiality and Ethics

The institutional review board encourages researchers to obtain signed informed consent statements from individuals being studied (Rubin & Rubin, 2005). An informed consent statement describes the purpose of the study, the background of the researcher,

and the benefits and risks of participating in the study. Most statements indicate the degree of confidentiality and promise to share the results with the participants. In qualitative studies, ethical dilemmas arise while collecting data and sharing findings because the truth is sometimes problematic (Merriam, 1998). The findings in this study were reported with accuracy and truthfulness.

I integrated confidentiality and obeyed the code of ethics throughout the data collection and analysis process. To ensure confidentiality, pseudonyms were used to protect the identity of the participants. As stated earlier, trustworthiness was established by collecting and reporting accurate interviews, engaging the participants in meaningful conversations, and using member-checking as a process through which participants verify data and the interpretations thereof (Lincoln & Guba, 1985). Protecting confidentiality also meant keeping interviews in a secure place so that others cannot discover the interviews, even if accidental. The participants of this study are regarded with the utmost respect, and their data were handled with care. The data collected was used only for the intended purposes. Copies of the transcripts was sent to each participant to review, clarify, confirm, and authenticate information and for them to make corrections, where needed, prior to publication.

Guidelines for Interpreting and Reporting Findings

Research data needs to be interpreted in a responsible and critical manner. My subjective position as the researcher has been explicated to the subjects. After data collection, the challenge was to make sense of the large amount of data, narrow it down, identify what is significant, and construct a frame for explaining the real meaning of what

the data reveals. Qualitative findings are judged by their substantive significance. Patton (2002, p. 130) suggests four questions to determine the findings' significance:

1. How solid and consistent are the findings?
2. To what extent do the findings increase understanding of the influence of instructional coaching on teacher retention?
3. How consistent are the findings with existing body of knowledge of teacher retention?
4. To what extent are the findings useful in informing policy or informing practice?

I will provide a plausible exploration for an audience that includes the superintendent and various state and local administrators. I will report my research design, analysis, and findings in a language that is easy-to-understand. The focus of the exploration was to understand what the findings tell us about the factors that influenced these mathematics teachers to remain in their role and their experience with coaching and how they interpret their experiences as "coached" teachers. The study also revealed the degree to which coaching might have influenced retention of these teachers, as well as the other factors that influenced their retention.

CHAPTER 5

FINDINGS

As stated in Chapter 1, this study examined the factors that influenced four second-career mathematics teachers to remain in their roles and the experiences of these four teachers with instructional coaching. The stories presented in this chapter are told by those of the four second-career mathematics teachers who agreed to participate in this study. Each of the participants has been teaching mathematics for 5 or more years. The data sources for collecting their stories included written narratives, focus group interviews, and participant observation; the photo elicitations were a secondary source of data. The research question guiding this study was, "Why have four second-career mathematics teachers remained in their role for 5 years?" The presupposition that instructional coaching might be indicated as a factor led me to the following subquestions for the study:

Subquestion 1: What are these teachers' experiences with instructional coaching?

Subquestion 2: How would these teachers describe instructional coaching?

Subquestion 3: Which aspects of coaching do the teachers find most beneficial?

Subquestion 4: Which aspects of coaching do the teachers find least beneficial?

Subquestion 5: What recommendations do the teachers have toward a more productive and beneficial coaching program?

To understand why these participants have remained in the teaching profession is to first understand why they pursued a career in teaching. I allowed my participants to tell me their stories through narratives. We have two ways of expressing our experiences: verbal or written. The benefit of writing one's experience is that it allows one to freely

express his or her thoughts, happiness, deepest regrets, or sometimes one's sentiments. This is because sometimes, things that are not easy to verbalize can be expressed through writing, and what the mouth cannot or will not utter can be conveyed through pens. The written narrative was used as a prompt for the first of three focus groups. Most of the participants wrote in their narratives that they went into the teaching profession and have remained because they consider teaching "a calling." They wrote and spoke about their passion for teaching. Most of the participants also indicated that the support from colleagues, peers, and their instructional mathematics coach was a factor that influenced their decision to remain in teaching. The images that the teachers submitted gave insight into how they interpreted the support of their instructional mathematics coaches.

The participants were cooperative and accommodating in arranging times, dates, and locations of the focus group sessions. Because the home of the researcher was the most convenient and least intrusive location, each session took place at the home of the researcher. All focus group sessions were attended by all participants with the exception of one participant missing the second focus group because of a prior engagement. When I member-checked and reviewed the responses from the second focus group, I was able to include the responses of the participant who had missed the second focus group. The willing participation of the teachers in the focus group sessions is what made this study possible.

Although I have been a part of the participants' lives for the past five years, I acquired new insights about these teachers as I listened to and analyzed their stories. As we discussed coaching during the second and third focus group sessions, we realized that we all had grown professionally as a result of our interaction with each other. One of the

participants, Cynthia, began using resources beyond the textbook to teach a concept. She stated that she does not lecture anymore. Two other participants, Jill and Victoria, have started to use more real–world applications to engage their students, and now Jonathan, the final participant, confers with me before implementing a new strategy in his classroom instruction. My interactions with these teachers have transformed my coaching practices into a more deliberate and purposeful approach to meet the needs of each teacher.

It is important that I introduce each participant (using pseudonyms) and provide descriptions of their journey through their narratives in the first part of this chapter. When the teachers answered the question, "What factors influenced you to remain in teaching?" in their narratives, each included the story of his or her journey of becoming a teacher. Therefore, I will describe each participant's background, his or her reasons for becoming a teacher, and finally, their reasons for staying in the teaching profession. The second part of this chapter contains the themes from the images and focus group sessions as they relate to the research sub questions. A simple coding system was used to identify when the participants shared the referenced information. For the narratives, the code "N" means that the teacher shared this information in his or her narrative. The code "I" indicates an image that the teacher has shared and the meaning that the image has for the participant. Finally, the code "F1" refers to the first focus group session, "F2" refers to the second focus group session, and "F3" refers to the third focus group session.

Table 1

Summary of Study Participants

Name	Years of K-12 teaching experience	Age	Race	Former Career
Cynthia	6	35	Black	Industrial Engineer
Jill	6	35	Black	Engineer
Jonathan	6	40	Black	Electrical Engineer
Victoria	11	35	Black	Company Intern

Participant Profiles

Meet Cynthia: *The Scholar*

Cynthia is a 35-year-old second-career mathematics teacher who began teaching when she was around 30-years-old. Cynthia has always considered herself very good in mathematics; therefore, she attended a local engineering school, where she received a scholarship, and majored in industrial engineering. Although Cynthia had always wanted to be a teacher, she pursued engineering because of the opportunity of the scholarship.

Why I am here:"It's in my blood." Teaching is a tradition in Cynthia's family, and it symbolizes her lineage. There is a long line of teachers in Cynthia's family. Her great grandmother, grandmother, and mother were all teachers. Therefore, Cynthia felt it was in her blood to become a teacher. Cynthia said, "I believe it is my lineage. I really believe I was called to teach. This is the one thing in my life that I believe I am really good at and that I succeed at most times" (N).

After realizing that she was not happy in her career as an engineer, Cynthia took advantage of an opportunity to leave the field of engineering to become a teacher. She then attended area local university and completed a master's degree in mathematics education. While studying for her master's degree, Cynthia visited the school in which she wanted to teach. This was just something that Cynthia felt she should do as she prepared for her transition into education.

Why I have stayed: "A dream comes true." Cynthia has a great thirst for knowledge. She reads and keeps abreast with current research in teaching and learning. Cynthia considers her engineering experience an asset to her teaching courses such as algebra and geometry. Cynthia wrote that she has remained in teaching because she is very knowledgeable of the subjects that she teaches. She wrote:

> I think my strength in the content area that I teach is very important. I am not intimidated by what I teach; therefore, I don't want to stop teaching. I still consider myself a student. So that means whenever I have an academic challenge, I study or I ask questions. I believe this has added to my longevity in the classroom (N).

Cynthia also credits her support system as a factor for remaining in the teaching profession. This support system consists of several individuals, including veteran teachers, peers, family, and also her instructional mathematics coach (the researcher). Cynthia wrote, "They give me the strength to continue in teaching" (N).

Meet Jill: *The Inspirer*

Jill had aspirations of becoming a teacher when she was a child. However, when one of her favorite 7th-grade mathematics teachers recognized her aptitude for mathematics, Jill's teacher suggested that she pursue teaching as a profession. Jill's response was, "If I am good at math, then I am going to go where I can make some

money" (F1). Therefore, Jill pursued an engineering degree in college; she worked as an engineer for 12 years. Although Jill enjoyed her job, she noticed that her work assignments had begun to decrease. "The pay was good but there was not much work" (F1).

Once Jill realized that she wanted to change careers and also that she happened to be pregnant, she began looking for an occupation that would be conducive to her being a mother. Jill thought teaching would be a great fit. She began her teaching career as a substitute teacher for her district. Jill became a full-time mathematics teacher at one of the high schools where the researcher coaches after another mathematics teacher was assigned to another school. As of now, Jill has been teaching at the same school for five years.

Why I am here: "Service to Mankind." Jill said that she became a teacher because she wanted to make a difference in a student's life. She entered the profession with hopes to inspire students to reach their maximum potential. Jill wrote in her narrative that she came into teaching with high aspirations—desiring to impart and share valuable knowledge and experience with students. She wrote:

> I want to share my knowledge and experiences that could help shape their present, future, character, and build desire. Each day that I prepare to teach, those thoughts are my foundations. I ask myself, what encouraging words might I speak, what experiences might I share and how might this knowledge that I have be shared for the benefit and growth of my students (N).

As a former engineer of 12 years, Jill feels she inspires and influences students to become whatever they desire to be. She feels that her success in engineering is testament that her students can become engineers, doctors, lawyers, and entrepreneurs. Jill is a very intelligent and positive educator who believes in the potential of all of her students.

Why I have stayed: "I want to accomplish my goals.". Jill spends several hours preparing materials, manipulatives, and activities to help her students better understand the concepts taught. Her goal was to ensure that her students were confident in their own success. Jill remains in teaching because she wants to accomplish her goal of student achievement. Jill wrote, "I am continuously working to accomplish the goals that I set out to accomplish. I am still in the teaching profession because there is still a lot of work to be done (N).

Meet Jonathan: *The Problem-Solver*

Jonathan started teaching at the age of 35 years. He is now in his 6th year as a mathematics teacher. Growing up, Jonathan was good in mathematics, science, and computers. He decided to pursue a degree in engineering because of his love for mathematics. Like Cynthia, Jonathan comes from two generations of educators, but he wanted to have nothing to do with teaching. Jonathan referred to his childhood as "stressful" because his parents were educators. He spoke of times when his family had no privacy because his parents and their students attended the same church, bought groceries at the same stores, and ate at the same restaurants. Jonathan said that he is a very private person, and as he remembers, being a teacher did not lend itself for a private life.

Why I am here: "Becoming part of the solution." Jonathan worked in the corporate world for 15 years as an electrical engineer. During that time, he became very disillusioned with being an engineer because he noticed that more and more of the positions such as the one he worked were being filled by engineers who were less qualified to do the work. Jonathan said, "That is when I knew sooner or later, I would be out of a job" (F1).

Jonathan is very passionate about his content area and his quest to find ways to improve achievement among African American students. He also wants to dispel the belief that poor performance in mathematics is hereditary. Jonathan's story was unique because it was mainly centered on his own children and his desire for them to be well educated. He wanted them to be challenged in their studies; therefore, he decided to become a teacher to possibly be part of the solution to some of the problems in education.

According to Jonathan, sometimes it seemed as if he was fighting against the world or maybe just the system in which he worked. Jonathan wrote, "The first factor of retention is my fight against the system and to introduce the younger generation to mathematics and science" (N).

Why I have stayed: "I must fix the problem.". Jonathan wrote that he will not leave teaching until he can fix the problems of educating African American students and discover ways to help his own children be productive and successful in the world.

Meet Victoria: *The Resolver*

Victoria, like the other participants, also started on a different career path. She was not always sure of what she wanted to become, but she knew that it was not a teacher. Mathematics was an enjoyable subject for Victoria, and she excelled in her mathematics classes. Because of that love for mathematics, Victoria majored in mathematics in college and graduated with an undergraduate degree in mathematics. After graduation, Victoria searched for a high paying job that would utilize her mathematics skills. Her search proved to be futile; each job required either experience or an advanced degree. Yet, Victoria did not let these barriers discourage her; she worked various internships and tutored her family members and other students in mathematics.

Why I am here: "Education chose me." One of Victoria's aunts suggested that she consider becoming a teacher because she was always tutoring her younger cousins in mathematics. Victoria wrote, "I was broke, so I applied to be a teacher. Within two weeks, I was standing in a classroom filled with students" (N).

Once Victoria began teaching, she obtained her alternative teaching certification from an area local university. Victoria took classes that would help her mange her classroom, prepare lessons, and deliver effective instruction. However, she wrote, "I had no idea of what I was doing, and my job was extremely hard. My students were unruly, and I did not know how to manage all the responsibilities of being a teacher. I wanted to quit during my first year" (N).

Why I have stayed: " I will not quit.". Victoria did not quit during her first year of teaching because of the advice from one of her pastors. She wrote that, "I talked to a pastor at my church and he told me, 'If you quit, they [the students] win. If you stay and hang in there, then you win.' Those words really resonated with me because I wanted to win."

Victoria also credits the support from the researcher, her instructional mathematics coach, as a factor of retention. She wrote:

> I am so happy that I had a wonderful mathematics coach at my new school. She would always help me find a positive solution to my questions, concerns, and complaints. Her example of a master teacher has really helped me grow and develop a love of teaching.

After 11 years of teaching, Victoria wrote, "I realize that teaching is what I love." When Victoria's coaching began, I remember her being asked to *be taught everything I know*. She was always willing to try any research-based strategy. So although Victoria did not initially choose to become a teacher, it appears that education chose her.

Themes on the Factors of Retention

Data from narratives, photo elicitation, and focus groups were used for triangulation. To analyze the stories of the participants, I used a narrative framework approach to view the stories holistically (Connelly & Clandinin, 1990). A narrative framework allowed me to examine the stories thoroughly and understand what was important to the participants in their professional lives that would cause them to remain in teaching. A case study approach was applied to obtain descriptive knowledge about why these teachers remained in the teaching profession (Bogdan & Biklen, 1982).

During data analysis, I reduced the participants' stories to sets of common elements, which revealed a set of themes. I used preset themes, such as job satisfaction and support, which were revealed in the literature. Consequently, the results are organized by the themes that emerged during data analysis. The themes from the written narratives and first focus group, as they relate to the main research question, are shown in Figure 1. These themes are reported by categories with supporting themes that further support the main theme. Each of these themes is discussed in detail in this chapter and is illustrated in Figure 1.

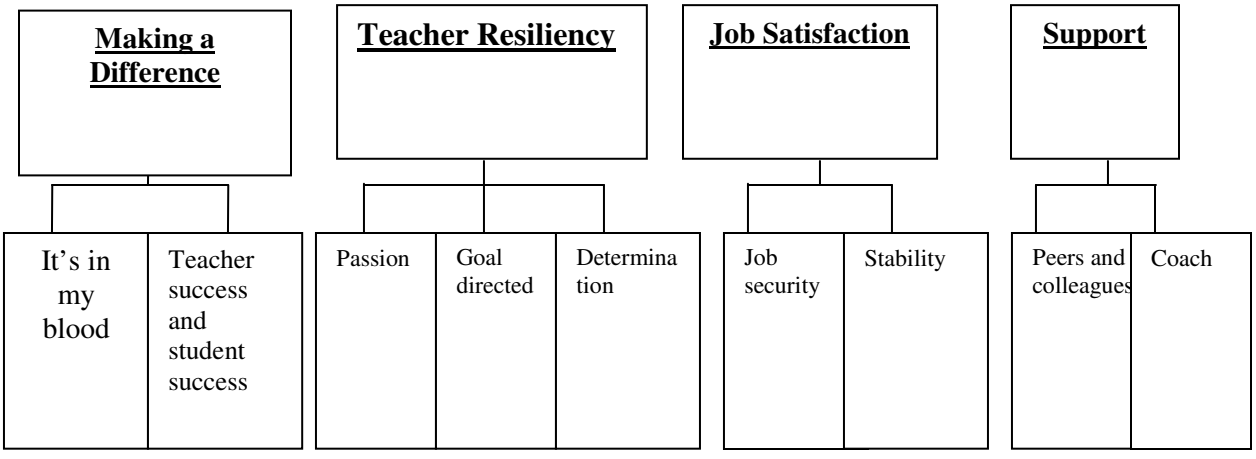

Figure 1. Emerging themes.

A discussion of the four themes identified in the current study, (a) making a difference, (b) teacher resiliency, (c) job satisfaction, and (d) support, will be followed by the results from the second and third focus groups and the participant's images, which were secondary data sources. The images solicited the participant's interpretation or description of coaching, and the focus groups discussed those interpretations and those aspects of coaching that the participants felt were least and most beneficial.

Theme 1: Making a Difference

Each of the participants in the current study entered the teaching profession to make a difference in their students' lives and in the educational system. These teachers can see the differences not only in their students' eyes when they understand a new concept but also when former students return to tell them how their teachers have inspired their direction in life. The three former engineers and one intern that participated in this study felt that they were all successful in their former occupations because of their work ethic and competence. They are very knowledgeable of their content area, and they all expressed, in their narratives, the confidence that they have in their success as a teacher and in their student's success. Cynthia wrote, "I really believe I was called to teach. This is the one thing in my life that I believe I am really good at and that I succeed at (most times)." Cynthia also wrote, "I always like to tell people that teaching is in my blood. I am the fourth generation on my mother's side to graduate from college and we all have taught." Jill wrote, "I feel that I was chosen to make that positive impact on the lives of others that was made on my life and that has greatly influenced my success."

These teachers are proud of their students and believe that all of their students can achieve academic success. Although the participants often expressed concern and

frustration with the low level of parental involvement, these teachers still try to provide the students with a nurturing and positive learning environment. Jonathan wrote about dispelling the myth that poor performance in mathematics is hereditary among African Americans. He wrote:

> Succeeding in spite of …. is the heritage of the African American race. The mere fact that African-Americans still exist in this country is a sign of our endurance and ability to overcome. It is with this same resolve that whenever I hear such statements from parents, I recall great doctors, engineers, and architects of our history. All of these great creators succeeded in spite of their conditions (N).

Victoria also expressed her desire to see students succeed. She wrote:

> I am driven by the fact that I want my students to learn how to think and critically study mathematics. It feels so rewarding after students struggle to see the light bulb finally turn on. Now, I am motivated to see more students become successful at learning mathematics.

Although only two of the participants expressed that they had always wanted to be a teacher, all of the participants have grown into effective teachers. I have observed these teachers' pedagogies transform from teacher-centered classrooms into more student-centered classrooms. I have noticed the use of more authentic assessments, teacher reflections, and collaboration. These participants are enjoying their roles as new teachers and feel that they have indeed been successful for the past five years. When I asked the participants to expound on their personal definitions of success, all of them equated their success to the success of their students. Cynthia put it plainly:

> When they (students) are successful, then I am successful. One way I define success is when my students were successful on the end-of-course test last year. But what really makes me feel successful is when my students come back to tell me, like one of my students at a college in Florida, that I inspired them to be an engineer (F1).

Similarly, Victoria nodded and said, “I would agree with Cynthia. The first thing that came to my mind was test scores. In addition to that, success for me is when, like seeing the student struggle, then finally he get it” (F1).

Likewise, Jill remarked:

> My success is when students are making progress and feeling good about what they are learning. I feel a greater amount of success when I see my struggling student’s lights come on for them. I really feel successful when I reach my level 1 and level 2 students. They understand what is taught on a daily basis.” (F1)

Victoria echoed the same sentiment, “When the students feel comfortable and confident in their ability to learn mathematics is when I feel successful as a teacher” (F1).

Conversely, Jonathan does not feel that a teacher can claim success if the performance is not repeated. He stated, “Success would be identified as the ability to repeat performance” (F1). However, he felt that a student is successful when he or she can claim the ability to add, subtract, multiply, divide, read, and write. Just recently, 100% of Jonathan’s 11th-grade mathematics students passed the state’s writing test. Jonathan had been using writing and literacy strategies for improving his mathematics instruction and student learning. Jonathan exclaimed, “What we have been doing is working; the data proves it” (F3). The success of their students and their teaching are factors that motivate the participants to remain in the teaching profession. The literature supports the claim that when teachers feel that they are making a difference, they are more apt to remain in teaching (Holloway, 2003).

Theme 2: Teacher Resiliency

Teacher resiliency has been identified as a reason why teachers stay in education. Holloway (2003) listed teacher resiliency as one of the three things that a teacher needs to stay in the classroom. Teacher resiliency has been defined as "the ability to adjust to varied situations and increase one's competence in the face of adverse conditions." The things that influenced the participant's resiliency, which also served as subcategories of this theme, were their passions for teaching and learning. It was also their determination and their "never quit" attitude that has fueled their resolve to successfully accomplish the goals they have set and remain in the classroom. The participant's passion was expressed when I asked them why they were still teaching.

Dot: Why are you still here? (F1)

Cynthia: Okay, I said it is in my blood (F1).

Victoria: My pastor told me that if I quit then the students win but if I stay, I win. I thought to myself, I am not a quitter. So I stayed. You gave me support, I don't know when it happened but I now have that passion for teaching. After ten years of teaching, I now tell people, "I love my job, I love what I do." It's real, it's not fake, but it took me awhile to get that feeling. So I am still here because I have passion. Maybe it's in my blood as Cynthia said (F1).

Cynthia: It's hard, even though I say it's in my blood, some days I ask myself why am I still here? (F1)

Jill: When I came into teaching, I came on a mission. I am struggling to meet those goals that I set out to accomplish. (F1)

In her narrative, Jill wrote that her goal was to impart valuable knowledge to her students and to inspire them to believe that they could accomplish any goal if they focused on their education. Victoria claimed, "Each time I get discouraged, I ask you for something different. When I experience the success, it give me confidence and rejuvenate my determination to be better. I constantly tell myself I can do this" (F1).

Jonathan added:

> I guess I am a kind of blend of you all. I was born in a house of educators and military personnel. Nowhere in my bloodstream is the "I give up" mentality. We just don't quit…At the end of the day, I have remained because of that same military and corporate mindset, I am not a quitter. Because of my corporate job, I feel I was hired to be a problem solver. So it does not matter what the job is, just solve the problem, I think we all can agree that in education, there is a huge problem (F1).

The next thing I wanted to ask the participants was about a challenging experience in their new roles as teachers and their approach to resolving the challenge.

Dot: All of you know how it is outside of education. You may or may not have experienced a challenging situation in your first career. However, tell me of a situation that really tested your determination and passion for teaching and how did you resolve the situation.

Jonathan: For me, that was two or three years ago. One of my administrators witnessed me defending myself against one of my students who had threaten my life. He said he would shoot me and he was not playing. I felt he was serious. This was my third situation with the young man. Other teachers who heard the student threaten me felt the student was serious. Because I do have a family, I knew I had to get this handled before I left the building. I did not want to be out at a restaurant somewhere and this young man comes up and shoots me. Therefore, I took it upon myself and told the student that there was no reason to delay this. If you want to do something to me, do it now. I did it that way because I had witnesses. During this time, an administrator observed this exchange and the administrator felt that I had handled the situation inappropriately. He directed me into a private meeting and his assistant took notes of the meeting. The administrator put in my file that I was wrong and unprofessional. That was my most challenging and soul wrenching day because I had to determine if being in school, being a teacher was the right place for me. I felt I could no longer trust the administrator or being in the system because the administrator was doing what he was advised to do. I resolved that the administrator was not in education because of passion but because of his job description. I did what I did because of my passion and I cannot compare my passion to someone's job description. So I stayed. (there is complete silence in the room and a look of "wow" on everyone's face) (F1).

Victoria: My days don't seem so bad now. That was really deep. Well… I have had many, many, challenging days. Uhm.. I can even speak of just last week. However, you have always said to be reflective and come to a solution. So

I have always been reflective as to ask myself what can I do to make it better or what am I doing to contribute to the problem? I have a part to play as well as the students. I realize that I cannot control them but I can control my behavior. So after this challenging time, I stayed late after school, reconfigured my classroom, reviewed my lessons, and basically restructured my class (F1).

Cynthia: I have not had anything quite like Jonathan but I think about three to four years ago when I was teaching in the trailer, the student behavior was awful. Each day was a different crisis. I would get so frustrated but I would talk to you and other teachers and you all would make me feel better. When you came on your one day, you would listen to my woes. I was just determined not to hold onto the frustrations (F1).

Victoria: You are right! You just have to let it go.

Cynthia: I talk to people to get it out of my system. I will tell the story over and over until it makes me laugh.

Jill: When I have challenging days, I usually tell someone about it too.

Dot: So how long will you stay in teaching?

Cynthia: I think about that often. I have not really aspired to do anything else but teach.

Victoria is laughing at this point, so I ask her to tell me how long she will stay in teaching.

Victoria: I am looking for that exit plan everyday. Okay, I am just joking around. I am going to remain as long as I can see a light at the end of the tunnel (F1).

Dot: As long as the light is not on a train. (Everyone laughs)

Cynthia: The pressure of being a mathematics teacher is enormous. But I am not going to quit (F1).

Jonathan: Specifically in the classroom, I will stay until uh.. well my daughter is one (calculating).. well for another fifteen years. I made a commitment to stay in teaching at least until my children are middle or high school students (F1).

Dot: What happens after that?

Jonathan: After that, I am trying to have a response or solution to poor academics in minority students. I will be in education until I can no longer move. So the goal here is to get many of the students who I call my replacements better equipped to deal with the dynamics of the upcoming generations. I want to make sure that the children of my current students are ready to function in their academia (F1).

Dot: You will be around for a long time.

Jonathan: I will be around for a long time.

Dot: Jill, how long will you stay?

Victoria: I know the truth Jill!

Jill: Good question, uh, you know I told you about my son. The condition of my son may be the determining factor on how long I remain in teaching. I would like to stay in teaching long term.

Jill had explained earlier in her narrative and at this discussion that she entered the teaching profession because it was a good fit for her considering that she was a mother. Her son has some challenges that have caused her to be at home with him for long periods of time. She was out for two or three months of this school year.

I asked these last two questions because the literature states that second-career teachers usually leave the teaching profession before their 5th year of teaching (Johnson & Baldacci, 2006). These teachers are presently in their 6th and 11th years of teaching. Their responses gave confirmation to their determination and resiliency to be successful and make a difference in the lives of their students and in mathematics education.

Theme 3: Job Satisfaction

It is reasonable to assume that if a teacher leaves the teaching profession, he or she was dissatisfied with the career in some way. The factors that contribute to that dissatisfaction would be the same factors that can influence job satisfaction and retention. The list of factors that contribute to job satisfaction is very broad. According to the

literature (NCES, 2007), teachers cited dissatisfaction with working conditions, lack of administrative support, and the school's proximity to their home as reasons for attrition. With proper intervention, such as more support, improving working conditions, and maybe a transfer between schools, these teachers could have been retained.

As I contemplated the research questions, I was interested in why teachers who have other career options enter the teaching profession and why they have remained. As I read the participants' narratives and listened to their responses during the focus group sessions, the data revealed that they were also looking for other factors of job satisfaction: security and stability. The Teacher Follow-Up Survey (2007) reported that 25% of the time, the most significant reason that teachers abandon the profession is to pursue a career outside the field of education. However, 46% of the mathematics department that I coach consists of second-career teachers. What do they seek? According to my participants, in addition to improving student achievement in mathematics, they also want stability and security in their profession.

Three of the four participants cited job security and stability as a factor for remaining. While Jonathan expounded on his reasons for remaining in the teaching profession during the first focus group session, he stated:

> So I did fifteen years in corporate. Then they asked me to go over seas to train other people how to do my job. That is when I knew sooner or later, I would be out of a job. I was training other folks to live in my country to do my job. I saw that trend happening and then I decided I should be thinking of an exit plan. Again, when I saw that trend, plus getting married, corporate America was not conducive to my mindset and family. When my son was eighteen months old, I decided to transition out of corporate. The only thing that had stability that got my parents through ups and downs was education (F1).

When Jill was deciding on a new career, she asked herself, "What profession would work well with me being a mother? I decided teaching would be a good fit for me"

(F1). Victoria's remark was, "I feel I have job security. As a teacher, especially mathematics, I don't have to worry about my job. I feel confident or I felt confident until the past year when I saw they were laying off teachers" (F3).

Theme 4: Support

A query of the data for the word "support" revealed that three of the participants highlighted support several times during data collection. All of the participants reported that they received various types of support from me. The participants spoke with such gratitude for the support they received from their peers, colleagues, and me. None of the teachers had a mentor assigned to them; therefore, they had to depend on the help and support from fellow teachers. Cynthia wrote:

> Another very important factor that is just as important as my lineage is my support system. When I began teaching, I was not given a mentor. However, I was blessed to have two knowledgeable, helpful, and supportive colleagues who also shared my planning period. These two teachers showed me the ropes. To this day, these two teachers are still very influential in my life. Secondly, I was also blessed to begin teaching when my county implemented mathematics coaches. My first year was also my mathematics coach first year. From day one, she has always been helpful. In the beginning, I did not see her often because she was assigned to three other schools. However, when I did see her she would always offer her expertise. I constantly remember her telling me, " Teach the standards." As most new teachers, I relied heavily on my textbook. If It was in the book, I would teach it. Dot has always been patient but truthful with me. I believe that has helped me grow as a teacher.

Cynthia also felt that one of her peers was an important part of her support system because they began teaching together. She wrote, "We began together, so we have shared most of our ups and downs together. I can call him whenever I need anything, day or night. His partnership has been invaluable." Cynthia also credits her family support system for giving her guidance. She wrote, "Without all mentioned support and guidance, I definitely do not know if I would have survived" (N). "I know if I did not have that

support, I don't feel I would have been successful or even would have stayed in the profession" (F1). Jill also felt that the support from her mathematics department was paramount. She stated, "I cannot imagine where I would be if I had not had the support of the department. I appreciate the support that I have gotten (F1).

Although Victoria was new to the school, she had prior teaching experience at another school. Victoria was able to compare her experiences of support at both schools. She stated:

> In my first school, I did not receive a lot of support. The support at this school has been great. I am so happy that I had a wonderful coach at this school. I would come to you with questions, concerns, and complaints and you would always help me find a positive solution (F1).

A major form of support that the participants stated was important and invaluable was that they knew they could come to me for any of their questions and concerns. One teacher stated, "On the first day that I started, you came in and helped me. So I was like, now this is nice, someone is here to help me. You stayed with me and let me know you wanted me to be successful" (F2). Victoria stated:

> Your support helped me come out of my comfort zone. I felt comfortable with you as I took risks to try new strategies. Sometimes lessons would not go well but we would debrief to figure out why it went wrong in order to make the lesson more effective. I would sometimes email you at two in the morning to tell you about an idea that I had for a lesson. I really love your support and relationship that we had (F2).

And according to Cynthia:

> If I was trying a strategy and it was not working, I would stop in the middle of class and come get you to help me. I have always regarded you as support because you have been with me from day one when I was a new teacher (F2).

Teachers' Experiences with Coaching

The primary research question for this study was, "Why have 4 second-career mathematics teachers remained in their role for 5 years?" As a result of the participants identifying the support of instructional coaching as a factor of retention, additional data was collected from the sub-questions that were listed earlier in the chapter. The sub-questions produced additional data in which different themes emerged pertaining to instructional coaching. This information about coaching that the participants shared gives a more "holistic picture" (Creswell, 1998, p. 15) of their experiences of coaching.

The additional data about the support of instructional coaching that were collected during the second focus group and the photo elicitation will be discussed in this section to provide a more detailed explanation and illustration of the participant's experiences with instructional coaching. Those experiences would encompass the influence that coaching has on the participant's teaching, how the participants interpret or describe coaching, and the least and most beneficial aspects of coaching. The themes that emerged from the above mentioned data sources were: (1) support from instructional coach is a resource, (2) support from instructional coach is a guide, and (3) support from instructional coach aids personal growth.

Theme 1: Support is a Resource

All of the participants expressed in some way that the support they receive from instructional coaching is a resource. The images selected by the participants and specific comments exemplified the essence of this theme. Images and interpretations are shown in Figure 2, and interpretations are discussed in detail in this section.

Figure 2. Victoria's image. The instructional coach needs to have a lot of strategies that they can share with the teachers in order to make them more effective. I really benefited from the ideas and strategies my instructional coach has shared with me. I have been able to achieve success using the instructional strategies that I learned from my coach.

Figure 3. Jonathan's image. It is the instructional coach's responsibility to equip and empower teachers with as many tools as possible.

Prior to the second focus group session, all of the images had been taped to a poster board without the participants' interpretations, and the participants were able to view each other's images. The discussion started with the participants sharing the reasons that they had chosen their image and expounding on the image's meaning.

Dot: Jonathan, tell us about your image of coaching?

Jonathan: The toolbox represents how the county does a very good job of equipping its coaches with a lot of different tools. Now in turn, how you figure out as a coach which tool to use with which teacher is a mystery (F3).

Victoria: I think the toolkit makes the difference in a coach because you do have so much training and those who want to receive the information take it and launch it to the next level. That is most helpful because I do not have time to go and research a lot of best practices. Having someone do the research, model, and share is a real asset (F2).

Victoria felt that an instructional coach needs to be equipped with many strategies that have been proven effective. She stated that she benefited from the ideas and strategies that I shared with her (I).

Cynthia said that I provided her with a plethora of literature and resources; in fact, sometimes I felt that I gave her too many resources.

Dot: How did you all feel about me giving you all those documents, articles, activities, and strategies?

Cynthia: Like I said before, I kept everything and I constantly use them (F2).

Jill: I think one thing that helped me receive your input was the fact that you told us what was in the information. I knew there was value in them (F2).

Theme 2: Support is a Guide

As Victoria shared thoughts about her images, the second theme that most participants agreed upon emerged. The teacher's images and interpretations in Figure 3 depict the essence of this theme. A detailed discussion of the participant's interpretation will follow the images.

Figure 4. Victoria's image. I believe that one of the main roles of an instructional coach is to model teach. Model teaching really helps the teacher learn how to apply the best practices of teaching because they are able to witness how to implement the strategies in an actual classroom. I was able to really mature as a teacher as a result of model teaching from my instructional coach.

Figure 5. Jill's image. Preacher and leaders are often thought of as caring people and who understand the needs of others. We all know that teaching is about more than presenting the lesson. It is also about presenting lessons in ways that grab students' attention and either create a desire in them to learn, make the lesson easy to learn and/or make the lesson easy to retain. I see my instructional coach as a caring person. People who care about others usually have good relationships with people. As a caring person, my coach, in addition to using his or her technical skills to support accomplishing the goals can also demonstrate the use of interpersonal skills to support accomplishing the goals. We have studied a lot about different learning styles. My instructional coach can provide guidance on how to reach students and promote and provoke a greater interest for learning for the different learning styles. I look to my instructional coach to be able to provide direction in this regard.

Dot: Victoria, tell us about your image.

Victoria: I see coaching as a model teacher who comes in and demonstrate lessons. I was able to really mature as a teacher as a result of the model teaching from my instructional mathematics coach (I). I really grew a lot from your modeling lessons because sometimes teachers don't get an opportunity to observe other teachers because we are teaching as well. When we do have professional learning, the presenters are modeling the strategy on the teachers not the students. When you model, you come into the classrooms and do it with the students (F2).

Cynthia: I remember when you modeled the lesson on surface area. The students were to build boxes for toy animals. The students loved the project. You showed me how to make concepts real world for the students. You broke it down on their level (F2).

Jill stated that she chose the speaker to depict coaching because she felt that I provided guidance on how to reach students and promote and provoke a greater interest for learning for the different learning styles (F2). Jill also remarked, "You understood all the things I was going through. The other thing is the personality. Your personality made me want to do what I needed to do. You inspired me" (F2).

Theme 3: Support aids Personal Growth

Many of the participants expressed their growth during the past 5 years. The participant's images and interpretations in Figure 4 illustrate the meaning of this theme.

Figure 6. Victoria's image. My instructional coach helped me reached the next level in teaching by providing constructive feedback. I was able to improve in areas that I was weak in or needed more professional development.

Figure 7. Jill's image. I see my instructional coach as a filter. He or she is someone who is very familiar with the requirements and expectations for the teachers and students. My instructional coach assists me with identifying what is important and strategies for accomplishing the massive things that are required of the students and me—with the students as the primary focus.

Figure 8. Cynthia's image. This image represents a colleague sharing information with another colleague. The women represent my math coach who shares all of her instructional resources with me. When she shares new ideas with me, my eternal light bulb goes off and my abilities are expanded. Working with my coach has made me grow as a teacher and allowed me to reach levels of success that I didn't always believe were possible.

Dot: Jill, why did you choose the filter?

Jill: Because there are so many expectations that are put upon teachers these days, you help me prioritize. Your support helped me to decide what I needed to do first and determine which task was more important to accomplish (F2).

Victoria: I look at the filter as determining what is good and what needs to be discarded.

Cynthia: I feel you and I have grown together. My image represents how we have shared information. When you share new ideas with me, my internal light bulb comes on and my abilities are expanded. Your support has made me grow as a teacher and allowed me to reach levels of success that I did not always believe were possible. I see you as a partner (F2).

A unifying meaning of the third theme was evident in the relationship that developed between the participants and the researcher/instructional coach. Though not all the participants described or interpreted the support in the same way, the findings suggest that the support of instructional coaching was paramount in transforming the teacher's professional growth. As a result, I asked the participants to respond to two other questions: (1) What are the most and least beneficial aspects of coaching, and (2) What are some recommendations for the coaching program?

First, all of the participants responded that the support was the most beneficial aspect of coaching. Jill remarked, "Your support and attitude was always positive. Your feedback always helped me be better (F3). Cynthia agreed by saying, "Yes, you always give us feedback." Victoria added, "The observation and feedback are also aspects of coaching that has made a difference in my staying in teaching" (F3). Jonathan said, "The exchange of communication about research was a beneficial aspect for me." He added, "When we started exchanging communication about research, that's when I said she is connecting with me. I am willing to do the work and once she puts me in the direction

she wants me to go, she will trust me to do my job. Once we had that kind of relationship, we began to grow together" (F3).

Second, the participant's responses to the question of the least beneficial aspect of coaching became a bit more intense. The responses given by Victoria and Jill were partially based on their experiences with their newly assigned coach. However, they all agreed that instructional coaching was becoming more administrative. The participants also felt that the observations were becoming least beneficial because they were becoming evaluative.

Jill: I don't like it that the coach come into the room to evaluate you and don't ask questions (F3).

Dot: Coaches' observations are not meant to be evaluative.

Cynthia: Well, they just come in, don't introduce themselves. That's rude.

Jill: Sometimes I feel I am in a no win situation because the new coach does not talk to me about the observation before he takes it to the administrator. (F3).

Dot: It sounds like the observing part of coaching has been the least beneficial aspect for some of you.

Jill: Only when it become evaluative. Our new coach gives observations to the principal.

Victoria: The coach needs to stay in the classroom longer.

Consequently, Jonathan thought the instructional coach wore two hats. He said, "I saw you wear two hats; the business or employee hat that required you to say or do what "they" said versus your teacher experience hat. My response to your business hat was this coach is not at all helping me figure out new ways to help children learn because she got to know this stuff she is selling is not working" (F3).

Finally, when I asked Jonathan how he would improve instructional coaching, his response surprised me. He simply stated, “More power.” Jonathan stated that he thought my role was a liaison between him and the administration. “My first impression of a coach was that you had certain powers that a teacher does not have. I thought the administrators had to listen to you because you represented the county” (F3). Victoria concurred with Jonathan because she felt that the instructional coach should be able to go to the administration on her (the teacher) behalf. I reminded Victoria of the situation when I went to the principal to reassign some of the more challenging students on her roster to different classes.

Cynthia felt that instructional coaches should be assigned to only one school. She said, “I am glad you now have only one school.” Cynthia also added, “Get rid of the administrative responsibilities. I believe coaches also need to stay at their school for several years to build relationships. I also feel that coaches should set the goals of the department” (F3). Jill was adamant about removing the administrative responsibilities from the role of coaching. She said, “It has nothing to do with children, and it does not help children.” Jill concluded, “It is a certain type of coach that makes the difference—one with certain characteristics” (F3). I asked Jill what type of characteristics? She replied, “Like the ones we mentioned in our images. A coach that does what you do… model, work with teachers and the students. It’s that type of coach that makes the difference” (F3).

CHAPTER 6

SUMMARY AND DISCUSSION

In this final chapter of my study, I will restate the research problem and review the method used in this study. The major sections of this chapter include a summary and discussion of the findings. In that discussion, I will include an interpretation of the findings, a relationship of this study to current research, and provide implications and recommendations for future research.

In 2007, the National Center for Education Statistics (NCES) reported in their 2004-2005 Teacher Follow-up Survey that nearly 20% of the teachers in the United States leave the profession after their 1st year of teaching and almost 30% leave after the 4th year. These percentages are even greater for mathematics teachers. The inability of schools to retain teachers is the largest contributor to the perceived teacher shortage (Kardos, 2004). Every year, the state of Georgia needs approximately 15,000 new teachers (Teacher Retention, 2008); yet, Georgia loses 33% of its new teachers during the first 5 years (Henson, 2008). Many students in urban schools have only a 50% chance of being taught by qualified teachers (Bartell, 2005). Despite attempts to support new teachers through mentoring and inductions programs, teacher retention rates are still too low, especially in urban and rural schools (Spencer-Ado, 2009; Smith & Ingersoll, 2004). Ingersoll and Kralik (2004) found that these well functioning supports are beneficial to new teachers; however, many of these supports do not function as intended (Andrew, Gilbert, & Martin, 2006). Since teachers continue to leave the profession, even with the

existence of mentoring and induction programs, more needs to be done (Ingersoll & Smith, 2004).

As explained in Chapter 4, my interest in the problem of teacher retention inspired me to study the reasons that four second-career mathematics teachers have remained in teaching for the past 5 years. To gain maximum insight and rich information, a purposeful sampling was utilized. These participants are teachers whom I have coached and whose lives I have been immersed in for the past 5 years. All the participants are African American and three were female (only one male participant). To effectively address their retention, a qualitative ethnographic case study was employed to explore and examine the factors that influenced these teachers to remain in the teaching profession. An ethnographic approach was essential in this study because I was a part of these participants' teaching experiences and culture. Participant observation is the primary approach to data collection in ethnography (Creswell, 1998). This method relies heavily on up-close, personal experiences and possibly participation—not just observation—by researchers. Although I have an insider's view of the participants' teaching experiences, I realized that my role as the researcher was to represent their reasons for remaining in the teaching profession as accurately as possible.

The following guiding research question and sub-questions were pursued in the study:

Guiding research question: Why have four second-career mathematics teachers remained in their role for 5 years?

Sub-question 1: What are these teachers' experiences with instructional coaching?

Sub-question 2: How would these teachers describe coaching?

Sub-question 3: Which aspects of coaching do the teachers find most and least beneficial?

Sub-question 4: How would you improve the coaching program?

The data for this study were collected through narratives, focus groups sessions, and photo elicitation over a 3-month time period. Being a part of my participants' lives for the past 5 years affords me the opportunity to give voice to their stories.

My departure from the traditional modes of educational inquiry to a more collaborative style focused more on the authentic interpretations and analysis of the participants' reasons for remaining in the teaching profession. A constant comparative data analysis compared each of the interview answers for similarities and differences. Data were (1) grouped into small, meaningful units, (2) coded, (3) grouped together in frequency and description type, (4) given category names, such as "goal-directed," and then (4) examined to identify themes or patterns in participants' responses to interview questions. Later, I reread and recoded the data to ensure trustworthiness (Denzin & Lincoln, 2003).

The first form of data collection was the narrative. Each participant submitted a one to two page narrative that identified the factors that influenced their decision to remain in the teaching profession. Most participants wrote about their background and their reasons for becoming teachers. Some teachers emphasized the work performed in their prior career and how this led them to the profession of teaching.

The narratives provided a starting point for our first focus group session. During this session, the participants were given the opportunity to expound more on their reasons for remaining in their roles as teachers. The participants shared information and talked as

a group about the factors that influenced their decision to remain. Each teacher wanted to share their background with the group, and one participant that had not written about her background was very eager to contribute to the discussion. The group eventually talked about the reasons they had remained in the profession.

Since the "support" of instructional coaching was identified as one of the factors of retention for the participants, I wanted to examine the support of the instructional coach by using images. This method of data collection is known as photo-elicitation (Harper, 2002). It was used to add a richer and more elaborate interpretation of the relationship of the instructional mathematics coach and the teachers (Deppler, Moss, & Agbenyega, 2008). These images depicted the participants' interpretations of the support provided to them by their instructional coach, which, in turn, would tell me about their experiences with coaching.

The teachers' images included pictures of a toolbox, a ladder, a filter, a speaker, and a model teacher. My images of a *toolbox* and *helping hands* were displayed for the participants. These images were the focus of the discussion during the second focus group session. Each participant was given the opportunity to view the images of the other participants, and the teachers compared and contrasted the images and discussed the interpretations of each of them.

The third and final focus group session was centered on a discussion about the most beneficial and least beneficial aspects of coaching. The participants were also asked if they had any recommendations for the coaching program. All of the participants spoke about *support* being the most beneficial aspect of coaching.

Each focus group session was recorded and video-taped. I used the video recorder as a supplementary source of interview recording. Upon watching the videos, I noticed that the participants looked tense during the first session. They acted as if they were pupils in a class. However, their apprehensions seemed to lessen at the subsequent sessions, in which they were more at ease and spoke more freely. The conversations became more animated with participants overlapping, interrupting, and completing each other's responses.

Before each focus group session, I allowed the participants to critically read and review my transcripts from the previous session and gave them an opportunity to provide feedback on each of the transcripts. If any edits were made, the edited interviews were then retyped. I looked for themes (reported in Chapter 5) as I hand-coded the data from the interviews.

Summary

Data identifying the factors that influenced the participants' decisions to remain in the teaching profession were compiled and analyzed. The participants all had unique stories as to how and why they came into teaching. Their reasons for remaining revealed notable themes: making a difference, teacher resiliency, job satisfaction, and support from peers, colleagues, and instructional coach. These themes answered the main research question, which was "Why have four second-career mathematics teachers remained in their role for 5 or more years?"

The essence of the first theme, making a difference, was exemplified with specific experience, attitudes, and statements all dealing with information about the participants' success and their students' success. Cynthia put it plainly, "When they (students) are

successful, then I am successful" (F1). Similar sentiments were expressed by two other participants. Many of the participants spoke of teaching as a calling in life; therefore, they were in the teaching profession to make a difference.

A review of the second theme illuminated the teachers' resiliency. Although the teachers expressed concern over low parental involvement, the participants are still determined for their students to be successful. Many of the participants spoke of their passion for teaching. Victoria remarked, "I love my job, I love what I do. It's real, it's not fake, but it took me awhile to get that feeling. So I am still here because I have passion" (F1). Jonathan echoed this sentiment when he said, "I did what I did because of passion and I cannot compare my passion to someone's job description" (F1). The participants' determination was also evident in their responses. Phrases such as, "I will not quit," "I am not a quitter," and "I don't want to stop," were used frequently by the participants.

Next, the participants categorized "job satisfaction" as job security and stability. Victoria stated, "I feel I have job security. As a teacher, especially mathematics, I don't have to worry about my job." Three of the four participants gave the same response.

Finally, the fourth theme highlighted the support the teachers received from their peers, colleagues, and instructional mathematics coach. The participants' peers and colleagues helped the teachers learn the administrative duties of becoming a teacher. The instructional mathematics coach provided pedagogical support. This study revealed that the support of instructional coaching was a factor of retention. One teacher commented, "I know if I did not have your support, I don't feel I would have been successful or even would have stayed in the profession." Other participants expressed that they could depend on my support and come to me for any questions or concerns.

Since the support of instructional coaching was revealed as one of the factors that influenced 4 second-career mathematics teachers to remain in the profession, the participant's interpretation of that support was investigated. The themes discussed in Chapter 5 and this chapter provides a comprehensive and holistic view of how the participants interpreted the support of their instructional mathematics coach.

The themes that were revealed from the participants' images and interpretations are: (1) support is a resource, (2) support is a guide or model, and (3) support is personal growth. The images regarding the participants' interpretation of my support were included because the images provide a picture of what the teachers experienced with coaching as well. The participant's images depicted my support as a resource. The teachers expressed, using words and images that they could come to me for advice, strategies, and new ideas to deliver a more effective lesson.

Also, some of the participants regarded my support as being a guide or a model, using images of a *model teacher in front of a class* and a *speaker in front of an audience*. The sentiments from these teachers illuminated the importance of the coach modeling in the teacher's classroom with the actual students. One teacher commented, "It is difficult for teachers to observe one another because we are also teaching." Another participant expressed that my modeling helped her reach her students and ignite their interest in learning.

Furthermore, the images revealed that the participants regarded my support as personal growth. The participants used images such as a *filter*, a *ladder*, and a *dialogue session* to depict their interpretation of my support. One teacher remarked, "Your support

has made me grow as a teacher and allowed me to reach levels of success that I did not always believe were possible." Similar views were expressed by two other participants.

In the third research sub question, I asked the participants to inform me of the least beneficial and most beneficial aspects of coaching. All of the participants agreed that the most beneficial aspect of coaching was the support. This finding substantiates support being an important factor of retention. The participants also valued the feedback given to them by their instructional mathematics coach after they had been observed. However, there was concern from two of the participants about the observations by coaches becoming "evaluative." Therefore, observations became the least beneficial aspect of coaching. It is important to note that these two participants were assigned a new instructional coach this school year. The other two participants decided that the administrative duties were the least beneficial aspect of coaching.

Finally, in the fourth research sub-question, the participants were asked to offer suggestions to improve the coaching program. They all agreed that instructional coaches should have more power, only one assigned school, and minimal administrative responsibilities. The participants want a coach who can model lessons in the classroom with the students, set goals for the mathematics department, build relationships, and work with the teachers and with the students. As one teacher stated, "It's that type of coach that makes the difference in me staying" (F3).

Interpretation of Findings

In analyzing the data, I began with a cross-analysis of the narratives (Merriam, 1998; Yin, 2003), the three focus group sessions, and the images, using the constant comparative method "to group answers to the research questions." This section of my

study discusses my interpretations of the findings and how the study relates to previous research. I will also give implications and recommendations for future research in this section. I will discuss the meaning of each theme in the same manner that I reported the findings in Chapter 5.

As a qualitative researcher, I had the responsibility of monitoring and stating my biases up-front. Although I am the researcher and participants' instructional mathematics coach, I was mindful to focus on each participant to ensure that his or her voice was heard. The symbolic interactionism, adult learning, and partnership lenses through which I viewed and analyzed the data validated each participant's voice in this study.

Symbolic interactionism formed the theoretical framework for this study because I was not only interested in recording the reasons of retention for these participants, but I was more interested in understanding why the participants have remained in the profession. Blumer (1969) stated that humans act upon things based on the meanings they have of those objects. Understanding the reasons why these teachers stayed in the profession required an identification of the factors involved and understanding the interpretations of those factors. While the symbolic interactionism theory served as my foundation, theories of adult learning and partnership also played a part due to the participants "learning to become teachers" and the partnerships that developed with each of the participants as I have coached them over the years.

Making a Difference

Although only two of the study's participants had a strong desire to become a teacher at an early age, they all seemed to have a similar personal altruistic characteristic, which is to educate African American students and make a difference in the lives of these

students. The teachers expressed that they were making a difference when they saw that their students understood a new concept. The teachers in this study consider teaching a "calling," and they are committed to educating the African American students that they teach. This finding is consistent with the research by Easley (2006), who found that teachers that begin teaching because of a sense of calling and commitment and will remain until that calling is fulfilled. Jill stated that, "When I came into teaching, I came on a mission." She added: "I have two missions now: one is to find ways to motivate my students to have the desire to want to excel and to also have the desire to do well in math. So that's my mission and the factors that influence me to stay in teaching" (F1).

Harper (2009) found that teachers who have remained in the profession believe that they are making a difference in their students' lives. Data from the current study also reveals that the participants have remained in teaching because they feel they are making an impact in their students' lives. Cynthia shared that it was rewarding to have a former student return to school to tell her how she had influenced the career choice that he would pursue in college. Jill also reminisced about former students returning to thank her for being a caring teacher. The teachers considered these experiences and others as indicators of success.

Most of the teachers interpreted their students' success as their own success. They felt that when their students were successful that felt they had been successful as well. The participants' viewpoints about success did not hinge solely on the results of standardized tests. Again, success to these teachers was measured by their students' growth and achievement and the impact that these teachers made on students' lives. It was interesting to note that the male participant stated, "You can only claim success if it

is repeated" (F1). Jonathan stated that a student is successful when he or she can read, write, multiply, divide, add, and subtract. He does not agree that a teacher can link his or her success to a single performance by a student; only when there is repeated favorable performances can a teacher claim success. Jonathan wants to eliminate such variables as having the smarter students or an easier version of the test.

Teacher Resilience

Findings suggest that the participants believe that teaching is important, and they are committed to their vocation. Although the participants experienced stress sometimes, they were determined for their students to be successful. One of the characteristics of the participants that really resonated throughout the study was their passion for teaching. These adult learners who have a real passion for teaching have persevered through the stress and challenges of educating students. Nieto (2003) identified a deep passion for students and their learning as one of the several factors of retention among eight teachers working in urban areas. In her study, Nieto also identified "belief in the purpose of education and hope about its rewards for students" as a contributing factor of retention. This research (Nieto, 2003) relates to the current study because it was found that the participants in this study also have a deep passion for both students and teaching.

Nieto (2003) also identified "a commitment to personal learning and professional growth" as a factor of retention among the eight teachers that participated in her study. Findings from the current study revealed that the participants believe in education and the advantages it gives their students. The participants' commitment to their personal learning and growth was evident through many of their responses to the research questions.

Teachers who have a real passion for teaching will persevere through the stress and challenges of educating students. This theme identified in the present study is aligned with the findings of a study by Patterson (2004) in which a teacher's resilience was partially defined as attributing their perseverance to a sense of feeling that they are on "missions." Again, some of the participants expressed that they were on a mission. Nieto (2005) found that many of the teachers in her study began their careers with a sense of mission that led them to remain in the teaching profession. That sense of mission keeps the participants focused and directed on the goals that they want to accomplish. Statements such as, "I will not quit, "I am not a quitter," and "I don't want to stop" reflect the participants' commitment to teaching and their motivation to help African American students excel in mathematics.

As the participants adjust to their new roles as teachers, their life experiences and knowledge in their prior careers influenced their learning to become a teacher. Jonathan stated that in his prior career, he was a problem-solver, so he uses this approach as he seeks solutions to help African American students succeed in mathematics.

The participants of the current study are determined to educate their students despite any adversity they encounter. Jonathan stated that one of his students once threatened his life (F1), and when he tried to handle the situation on his own, he was admonished by an administrator. At this time, Jonathan questioned the decision he had made to become a teacher; however, he later resolved that he could not compare his passion for teaching to the administrator that was simply "doing his job." As the other participants shared some of the challenges they had encountered while teaching, each of them reflected on their reasons for entering the profession. Those reasons, such as "it is a

calling" and "a passion for teaching," proved to influence their decision to remain in teaching.

As I can recall, most of the participants had a tumultuous first year of teaching. Cynthia began her teaching career in an environment that was not very conducive to learning. She was assigned to teach in what is referred to as "learning condos," better known as trailers. The students' behavior was sometimes very challenging, and Cynthia reflected on these initial behavioral problems at one of the focus group sessions. Jill and Victoria had similar problems during their first year of teaching. Victoria wanted to quit several times (as I can remember).

According to Holloway (2003), teacher resiliency has been identified as a reason why teachers stay in education. Because of the challenges of the classroom and the stressful nature of the job, a teacher needs resiliency or the ability to adapt and bounce back when faced with upsetting or stressful conditions (Bernshausen & Cunningham, 2001; Bobek, 2002, p. 202; Holloway, 2003). The participants of the current study have great resiliency and passion for teaching.

Guy and Day (2007) noted that resilience is a psychological construct that incorporates factors such as self-esteem, self-efficacy, and motivation. The findings of the current study suggest that these participants consider themselves to be successful and are very motivated to accomplish their goals of helping their students succeed in mathematics. Guy and Day (2007) also suggest that this resilience is influenced by social systems of inter-relationships that incorporate external support systems, such as peers and colleagues. These support systems help buffer the effects of the adversity encountered. Most of the participants spoke about how they would seek help from members of the

mathematics department and the instructional coach (the researcher) when they had problems. Jill stated, “I cannot imagine where I would be if I had not had the support of the department.” Cynthia remarked, “When you weren’t there, I would call you when I needed help.”

Seeking help and advice is the way these new teachers survived and established their resilience. Cynthia mentioned that she did not have a mentor; however, she would seek advice from other teachers, which was during my first year as a coach at the school where she works. When I began coaching 5 years ago, I was assigned to 4 different schools. Therefore, I was only at each school for one day of the week. Just as Cynthia sought help from other teachers, the other participants did as well. Jill stated, “My department was very helpful to me.”

Since all of the participants had prior careers in industry, they each bring a wealth of life experiences and knowledge into their classroom. These experiences lend themselves to the participants being very autonomous and self-directed. They know what they want to accomplish and are motivated to help their students succeed in mathematics. I often refer to Jonathan as someone who “marches to the beat of a different drum.” He was affectionately labeled as “The Problem-Solver” because he needs to be free to direct his own path. Despite the strategy that was presented to Jonathan, he would always counter with an alternative strategy to address the situation. Therefore, I learned to give Jonathan the autonomy to solve his own problems—but I was there if he needed me. Jonathan stated, “She trusted me to try a strategy, to do my job.”

Job Satisfaction

Teaching is viewed as a demanding and stressful profession (Stoeber & Dennert, 2008). Cynthia said: "I tell people all the time that teaching is the most difficult job that I have ever had in my life. It demands and merges into all aspects of your life." However, the results of the current study reveal that the participants are satisfied with their new roles as teachers. The participants' responses to the research questions revealed that some of them were not happy in their prior careers as engineers. Although they made a substantial amount of money, they were not satisfied with their positions. The participants' reflections about their prior careers did not evoke smiles as were noticeable when they spoke about watching a student's "light" come on after struggling with a math concept. Victoria reflected, "When I see a student struggling and then she finally gets it, that makes me feel good" (F1).

The participants also spoke about their love for mathematics. The teachers enjoy teaching the subject because they are able to share this love with their students. These participants are very knowledgeable of mathematics and are among some of the most passionate teachers that I have coached. Their professional experiences (as engineers and as an intern) have given them life experiences that can possibly help direct their students along pathways of professional success. There is a growing body of literature indicating that teachers who are educationally well prepared seem to enjoy the profession and intend to stay longer (Darling-Hammond, 2010). Curtis (2005) revealed that job satisfaction impacted new teacher retention. The analysis of Curtis' study concluded that job satisfaction was a significant predictor of teacher retention after the first year of teaching.

Curtis (2005) concluded that after 5 years, teacher efficacy was the most significant predictor of retention. The present study shows that other factors, extending beyond teacher efficacy, contribute to teacher retention. The findings indicated that these participants have acquired a sense of stability in their new role of teaching. In the participants' prior positions, their lives were disturbed by the constant, routine changes that usually occur in industry. Yet, teaching has given these teachers a sense of stability that allows them to take care of their families. Jill spoke about how she was looking for a career that was a better fit for raising a family. She had been an engineer for 12 years, but she wanted more stability for herself as she began a family. Ironically, Jill's reason for coming into teaching is one of the reasons for teacher attrition (Kukla-Acevedo, 2009).

Similarly, Jonathan wanted and needed to provide stability for his new family, too. It was apparent that the participants' families were very important. As some of these participants made plans to transition from the field of engineering into new roles as teachers, data revealed that they were looking for an occupation that has stability. Although some of these participants, coming from careers in the field of engineering, had tremendous success and monetary gains in their former careers, they were not satisfied with their jobs.

Again, each of the participants in the current study has experienced success in their new roles as teachers. They are all confident in their knowledge and expertise, and they each enjoy teaching. Two of the participants shared that they had always wanted to become teachers but had taken different paths due to other opportunities. Most of the participants consider themselves secure in their present role because for some, they are fulfilling what is for them "a dream and a calling." They also feel that they are freed from

the prospect of being separated from their family, down-sized, or even laid off. Jonathan stated that he had experienced all of the dynamics of industry and was ready for a change. Victoria said, “I feel secure in my job as a mathematics teacher, well until lately, when I saw them laying off teachers.” I told her, “You have nothing to worry about.”

Support

The retention factors cited by the participants are consistent with reasons of retention reported by Ingersoll &Kralik, 2004; Curtis, 2005; Inman & Marlow,2004; and Holloway, 2003). Thompson (2007) found that new teachers need specific supports, one of which was administration. Notably, none of the participants in the current study indicated administrative support as a factor of retention. This research revealed that support from the participants’ peers, colleagues, and their instructional mathematics coach influenced their decision to remain in teaching.

Findings suggest that most of the participants considered the support of their peers and instructional mathematics coach invaluable. Cynthia mentioned two teachers that were instrumental in helping her prepare geometry lessons during her first year of teaching. Cynthia also noted that Jonathan was a great support for her because they started teaching together, which gives her someone to share her triumphs and trials with on a daily basis. During the participants’ first year of teaching, I was assigned to three other schools; therefore, I could only assist these teachers once during the week. Having the other support systems helped the participant’s transition into teaching.

After the participants’ second year of teaching, I was assigned to only two schools, which enabled me to give the teachers more sustained support. As I began to coach them more frequently, their self-direction became clearer to me. They each wanted

the autonomy to decide what was needed for them to be effective teachers. They were more receptive to my suggestions when I respected and considered their ideas for delivering instruction. The participants made remarks about how my respect for their ideas enabled them to grow professionally, in accord with Holloway (2003). Teachers are more apt to remain in the profession when they feel empowered and receive sustained support.

Throughout my 8 years of instructional coaching, I have always considered my support as on-site professional development (Knight, 2006). As I have interacted with my participants for the past 5 years, I have observed, assisted, and trained them to implement effective instruction. When participants were asked to interpret my support through the use of images, the pictures they submitted (a toolbox, a ladder, a filter, a farmer, dialogue, a minister, and a model teacher) gave me a new insight about how these teachers give meaning to their experiences with instructional coaching.

The toolbox, according to the participants, represents the various strategies that are shared with them. I was not surprised to see this image as a depiction of my support. As stated earlier by Victoria, "Teach me everything you know." The tools in the toolbox also represent knowing which tool to use to coach each teacher. The putty knife in the toolbox could represent "a smooth layering"; it goes on easily. I would utilize the putty knife to coach Cynthia and Victoria because they are easygoing and very receptive to learning. However, the hammer might be more appropriate for Jonathan and Jill because it took a lot more persuasion for them to consider my instructional suggestions.

As I continue to analyze the findings through this symbolic interactionism lens, I surmised my support as a resource for the participants. The teachers felt that at any given

moment, I should be able to give them a strategy that would ensure student success. Sometimes, that expectation was stressful for me because at times, I needed more data about the students and more time to process the details of the situation.

Consequently, the images of the model teacher and the minister gained much attention. I was interested in the meaning that the two participants constructed for these images, learning that they interpreted my support as being a model and guide. These teachers admitted that they want and need someone to inspire and lead them. Although they are self-directed as adult learners, they benefit from the model teaching and guidance of their instructional coach. A previous study (Bolich, 2001) about helping new teachers remain in the profession concluded that the opportunity to observe effective teaching is invaluable for new teachers. The findings in this section are consistent with this.

Becher (2001) studied the instructional coach's interpretations of their roles. In this study, coaches interpreted their roles as a collaborator, a model, or a director. In the current study, the participants interpreted the support from the instructional coach as a model and guide.

Finally, the participants shared images of a filter, a ladder, and a dialogue that represented their personal growth. These images helped me understand that these participants had grown professionally. That is why they asked questions, reflected on their practice, and transformed their work and world. The partnership that was formed from our interactions gave the participants a voice and freedom to construct their own direction in becoming a teacher. I served as a "guide on the side" who provided the encouragement that was needed for the participants to grow. As each teacher grew

professionally, I gave insight and advice on goals that the participants had set for themselves and their students. I indeed "filtered" out the strategies and ideas that I knew would not be effective in their classrooms. The sharing of effective strategies, current research in education, and quality instruction helped further develop each participant's pedagogy.

Participant's recommendations

Participants were asked what the least beneficial and most beneficial aspects of coaching were and also asked to provide recommendations for coaching. The answers to these questions were important because of the partnership-based approach that was taken in this study. Their responses were very candid and, in some cases, surprising.

All of the participants agreed that the most beneficial aspect of coaching was the support. The participants considered the support of an instructional coach very important because it helped them learned how to become a teacher and grow professionally. The support also helped them meet their goals of helping their students succeed in mathematics. Although each participant interpreted the support of the instructional coach differently, they all agreed that the support was present to empower them.

Interesting to note is that all of the participants agreed that the least beneficial aspect of coaching was that it was becoming evaluative. For clarity, the participants elaborated on the observations that instructional coaches perform. However, observations are a part of a coach's job. The observations are meant to be used to identify the areas of instruction that need improvement. The content of the observations is to be shared between the coach and the teacher. The participants welcomed the opportunity to be observed by the instructional coach because they value the feedback of the coach.

However, some of the participants have interpreted the observations as evaluative because their new coach has shared their observations with the administrator. Nonetheless, the observation is not really "evaluative" because the instructional coach cannot give a rating of the teacher's performance.

The participants gave several recommendations to improve the coaching program. They suggested that coaches have more power, only one school assignment, and fewer administrative responsibilities.

Giving coaches more power positions them to be more of an advocate for the teachers. As one of the participants stated, "My first impression of a coach was that you had certain powers that a teacher does not have. I thought the administrators had to listen to you because you represented the county" (F3). Likewise, if the administrators would have to listen to the coach, would not the teacher have to listen to the coach as well? As an instructional coach, I do not seek authority or power as I support mathematics teachers. Incidentally, I seek the same thing that the participants find most beneficial of coaching—support.

The other recommendation that the participants provided was for coaches to be assigned to only one school. It is beneficial to both the coaches and the teachers when an instructional coach is assigned to only one school. Sustained support is very important because it provides consistency in the work of the coaches and teachers.

The last recommendation for the coaching program was for the coaches to have fewer administrative responsibilities so that the coaches can do their work well. Instructional coaches are assigned to help and support teachers improve their pedagogy and assist new teachers as they transition into their new role as teachers.

Implications and Recommendations

The overall purpose of this study was to investigate and examine the factors of retention of four second-career mathematics teachers and their experiences with instructional coaching. The review of the literature on teacher attrition and retention provides a history of research that illuminates the interventions that have been used to retain teachers. Few studies containing empirical data for teachers of mathematics were found. Most of the studies discussed the reasons that teachers, in general, remained in the profession. In most cases, the research did not differentiate or make a case specifically for mathematics teachers. It was a surprise to find so little research about mathematics teachers since the literature documents the shortage of mathematics teachers. Of the studies discussed in Chapter 2, most documented that teachers remain in the profession because of their resiliency and job satisfaction. The reasons that teachers leave the profession ranged from "job dissatisfaction" to "lack of administrative support." With a focus on mathematics teachers, the findings of this research have implications for: (a) leaders of districts and schools, (b) instructional coaches and mentors, and (c) policymakers.

Leaders of Districts and Schools

Most of the teachers who participated in this study have prior work experience in the field of engineering. They bring a tremendous amount of experience and knowledge into the classroom. These mathematics teachers return year after year to grow professionally and accomplish their goal of helping students succeed in mathematics. To keep passionate teachers in the classroom, leaders of districts and schools should examine

the interventions for retention that are presently in place. These district leaders and school leaders need to find ways to identify and hire the types of mathematics teachers who have passion for teaching and are motivated to teach. Seeking and hiring better-prepared teachers has many pay-offs and long-term savings in terms of both lower attrition and higher levels of competence in the classroom (Darling-Hammond, 2003). Our students could definitely benefit from this investment.

Participants in this study did not identify "administrative support" as a factor in their decision to remain. This is in sharp contrast to the other research findings (see Darling-Hammond, 2003; Inman & Marlow, 2004; Johnson & Baldacci, 2006). Principals need to be more involved in the experiences of new teachers. The "hands-off" approach is not advisable because of the presence of a mentor or instructional coach. Principals should be more involved in the instructional process of his or her new teachers and not solely as disciplinarians. The only mention of an administrator in this study was when one of the participants, Jonathan, was handling a student behavior problem.

Furthermore, new teachers should not be assigned the most challenging courses or classes. As new teachers become acclimated to the teaching profession, their resilience is strengthened. They are able to handle more adverse situations. Leaders of districts and schools should understand that providing appropriate and sustained support for new teachers can strengthen their resilience, therefore increasing teacher retention.

Instructional Coaches and Mentors

My position as the researcher and the instructional mathematics coach placed me in a unique position. As I listened to the participants talk about why they have remained in the teaching profession, I was shocked by some of the revelations about coaching,

especially mine. Cynthia stated, “You do a good job of balancing the administrative and coaching duties.” Yet, I did not realize that I was balancing both duties. As a matter of fact, I thought I was simply coaching; but somehow, my coaching was interpreted as administrative.

Instructional coaches must be mindful that their purpose is to support the teacher. That support should be provided in using a partnership-based approach. In this partnership, both the teacher and the coach are treated equally. The teacher should have the voice and the autonomy to choose his or her direction of professional growth.

It is also important for the instructional mathematics coach to have the mathematical skills and knowledge to effectively guide and support new teachers. In this study, it was revealed that I provided my participants with mathematical as well as personal support and instruction in several ways, such as: (a) modeling lessons and providing teaching strategies, (b) demonstrating how to connect concepts to the real world, and (c) showing how to differentiate mathematics instruction for a variety of learners.

Policymakers

In the current study, it was found that the participants were part of an alternative teacher preparation program, but they did not identify the existence of this formal structure as a factor of retention. There was no mention of a mentor or induction program for the participants. Kardo et al. (2001) found that the formal structures of support that teachers received from mentoring, classroom observations, and formal meetings did not provide the support that new teachers needed. Conversely, the participants in the current

study did receive the support they needed from their colleagues, peers, and instructional mathematics coach.

In most cases, formal structures of support are placed in schools, but they do not operate as effectively as they should. It is important that policymakers ensure the following:

1. Schools need sustained support of a master teacher (instructional coach) who has been released from teaching duties to be assigned as coaches to new teachers.
2. Instructional coaches need meaningful training and leadership support to do their jobs well.
3. Schools and principals should provide common planning for mathematics teachers to collaborate and support each other.
4. Principals should be required to devote time and attention to topics that focus on curriculum and instruction.
5. Schools need increased resources (monetary and materials) to foster the professional development program of new teachers.
6. Schools need to formalize programs aimed at assisting new teachers.

The implications of this study to leaders of districts and schools, instructional coaches, and policymakers are abundant. Assisting and supporting new teachers in their development toward becoming competent educators is critically important if we are to retain quality teachers who can impact student achievement. Simply having formal structures of support in place at schools is not enough if these functions are not operating correctly. Policymakers must invest in these schools and provide schools with the

resources they need to assist and support new teachers. Principals should be more involved in the experiences of the new teachers and provide support to their instructional coaches to do their work well.

Recommendations for Future Research

The current study of four new second-career mathematics teachers has provided valuable insight into their reasons for remaining in the teaching profession. The findings from this study are consistent with the findings of other studies; however, the small sample size evokes the need for continued research. For example, future research could use both quantitative and qualitative data to survey a larger population of new second-career mathematics teachers. Future research could also draw out distinctions between the factors of retention of first-career and second-career mathematics teachers. Furthermore, this study could be repeated in 5 years to see if the participants have remained in the teaching profession and to further explore the roles of their life experiences. Finally, a research focus on the personal characteristics that influence retention would be important to understand.

Closing Remarks

I conclude this study with a gratitude that is immeasurable. I express gratitude to my participants for finding their way into teaching and for remaining in the profession. This gratitude is not based on the participants' contributions to the retention rate but for their passion for teaching their students, for believing that these students could be successful, and for wanting these students to be successful. During a time when everyone is looking out for him or herself, these four teachers could have chosen any other profession that would utilize their mathematical knowledge, but they chose to teach.

My coaching experience has been a long journey of accomplishments and disappointments. Throughout this journey, I have witnessed these teachers grow professionally. As I have watched them grow, I have also grown. I have advised a new instructional coach to build relationships prior to trying to change the teacher's pedagogy. My philosophy to teaching and coaching has always been, "Before you can teach them, you have to reach them."

The past 5 years have been rewarding because I have seen the participating teachers develop into very effective teachers. When I first met Victoria, I remember her telling me, "Teach me everything you know." That statement has remained with me. Reflecting on my coaching relationship with Victoria and the others, I have taught her and the other participants everything I know. Now, they are teaching me what they know.

Conducting this study was important because I wanted the participating teachers to share why they have remained in the teaching profession and to illuminate the relationships that have blossomed as a result of the coaching. When I began coaching, I felt very isolated from the teachers. I was regarded as "Building B," and when I was at the different schools, I definitely was not welcomed in the classrooms. However, these new teachers were different; they welcomed the support and were eager to work with me.

Now, 5 years later, these teachers are still striving to make a difference in their students' lives. Each year, they get a new group of students with whom they share their love of mathematics. Although each year brings new challenges, these teachers will persevere because they love what they do. *They chose to teach*.

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APPENDIXES

APPENDIX A

Georgia State University
Department of Teaching and Learning in Mathematics
Informed Consent

Title: An Understanding of Retention and Instructional Coaching Using the Experiences of New Second-Career Mathematics Teachers

Principal Investigator: Dr. Christine D. Thomas, Advisor
Dorothy Lewis-Grace

I. Purpose:

You are invited to participate in a research study. The purpose of the study is to explore and understand why you have remained in your teaching role and your experiences with instructional coaching. You are invited to participate because you have remained in the teaching profession for the past five years. A total of four participants will be recruited for this study. Participation will require 3 one hour meetings over 4 to 6 weeks from September to October.

II. Procedures:

If you decide to participate, you will receive instructions to your email on writing an unstructured narrative describing the factors that have influenced your 5-year retention in the role of teaching mathematics. These narratives should be returned to my private email dgrace2010@att.net within 5 business days. You will be participating in focus group discussions with the other participants. After receiving the narratives, I will schedule the first focus group based on the participants' availability. Each discussion group will be audio and video-taped and last 1 hour under the direction of the researcher acting as the moderator. The focus group will meet three times over a period of four to six weeks at the homes of the participants. Each discussion group will begin with an introduction and a brief explanation of the meeting's objective. After each focus group discussion, we will schedule the next focus group meeting and location. The objective of the first focus group is to discuss your narrative. You will also be asked to choose two or three images of your own that depict your interpretation of instructional coaching. The images you select should include a caption or explanation. You will bring your images to the second focus group. I will also bring my own image to depict my interpretation of coaching. The objective of the second focus group is to discuss your images and your experiences with coaching. The third focus group will be used to clarify themes and member-check for accuracy.

III. Risks:

In this study, you will not have any more risks than you would in a normal day of

life.

IV. Benefits:

Participation in this study may not benefit you personally. It is expected this study will benefit schools and school districts with respect to the findings on teacher retention. While there is no direct benefit to the participants, it is expected their careers will be enriched through the process.

V. Voluntary Participation and Withdrawal:

Participation in this research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You also may request to inspect any instrument related to the study. You will not experience any undue pressure to complete the focus groups. You can choose whether or not to participate in any part of the study and stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

VI. Confidentiality:

We will keep your records private to the extent allowed by law. Only my advisor, Dr. Christine Thomas, and I will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly (GSU Institutional Review Board and the Office for Human Research Protection (OHRP). We will use pseudonyms rather than your name on study records. The information you provide will be stored on a password and firewall-protected computer in my home office. Your name and other facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally. During the study, audio and video tapes will be kept in a locked file cabinet in my home office. I will be the sole processor of the key. After the study is completed, the audio and video tapes will be destroyed by shredding the tapes and/or deleting the files after five years. All focus groups should take place in a room with a door to provide privacy and confidentiality. There should be no interruptions as the focus groups convene. In respect for each other, we ask that all responses made by all participants be kept confidential. However, I cannot guarantee the confidentiality of your information because others are present.

VII. Contact Persons:

Call Dr. Christine D. Thomas at 404-413-8065 or the researcher, Dorothy J. Lewis-Grace at 770-265-6259 or email dgrace2010@att.net if you have questions about this study. If you have questions or concerns about your rights as a participant in this research study, you may contact Susan Vogtner in the Office of Research Integrity at 404-413-3513 or svogtner1@gsu.edu.

VIII. Copy of Consent Form to Subject:

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research and be audio and video recorded, please sign below. Please return the consent form through DeKalb County courier to Dorothy J. Lewis-Grace at Columbia High School.

_____	_____
Please print and sign participant's name	Date
_____	_____
Principal Investigator or Researcher Obtaining Consent	Date

APPENDIX B

Narrative Prompt

I am excited that you have agreed to participate in this study concerning teacher retention. I am asking that you write about the factors that influenced you to remain in teaching. You may structure it in any way that you decide. If it is at possible, I would like to get at least a page or whatever you can do in an hour of your time.

Please submit your narrative electronically to Mrs. Lewis-Grace in 5 business days.

APPENDIX C

Focus Group 1- Agenda

Objective: Narrative discussion – Participants submitted narratives concerning their reasons for remaining in teaching (video-tape will be set up prior to meeting)

Location: Home of one of the participants

Time: TBD

Opening: Welcome and introductions
Moderator will explain what was done with the narratives.
Common themes and patterns will be shared with the group.

Group discussion: I will ask each teach to share and authenticate what I captured from their narratives. Probing questions include:

1. Why did you remain in the teaching profession?
2. What factor influenced you to stay?
3. Describe some challenging times. What did you do? What were your resolutions?
4. How long will you stay?

Focus Group 2 - Agenda

Objective: Coaching image and experiences discussion – Participants will reflect and discuss their experiences with instructional coaching (video-tape will be set up prior to meeting)

Location: Home of one of the participants

Time: TBD

Opening: Welcome

Moderator will explain what was done with the images. Common themes and patterns will be shared with the group. Moderator will explain the protocol for the discussion about the participants' experiences with instructional coaching. I will begin the discussion by sharing my experiences of coaching.

Group discussion: I will ask each teacher to show their image and authenticate what I captured from their image. Probing questions include:

1. Why did you choose that image?
2. What is its meaning?
3. How does it compare or contrast to the other participants' image?
4. How does it compare or contract to the researcher's image?
5. What have we been doing for the past five years?
6. Did it make a difference?
7. What was most beneficial and least beneficial about coaching?

Focus Group 3 - Agenda

Objective: To member check participants' responses to their experiences with instructional coaching(video-tape will be set up prior to meeting)

Location: Home of one of the participants

Time: TBD

Opening: Welcome

Moderator will member check. I will insure that each participant's voice was accurately stated.

Group discussion: Participants will share last thoughts and reflections and I will continue to member check and search for common themes and patterns.

APPENDX D

Coaching Image

Please select two or three images or graphics of your own that depict your meaning of instructional coaching. *Please do not choose photographs of students of DCSS. These images cannot be photographs of any student of DCSS. Your images should not include any people*. Each image should include a caption or explanation of its meaning. An example is provided below:

My instructional coach came to me with a great big toolbox

filled with the best practices of teaching. With the tools that I received from my instructional coach's handouts from her own personal research or redelivery workshops after school, I was able to mature as a teacher and begin to climb up the ladder of success.

Please submit images electronically to Mrs. Lewis-Grace in 5 business days.

APPENDIX E

Project: New teacher retention.xsp
Analysis Framework: secondary mathematics teacher retention
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Factors of retention\support

Cynthia ***(Unknown)***

I think it is very beneficial to have support. Like I said before, when I started teaching, I did not have a mentor. However, there were two teachers who had the same planning as I did and these teachers took me under their wing until you got there. Jonathan and I started together so we planned together.

I know if I did not have that support, I don't feel I would have been successful or even would have stayed in the profession.

Victoria ***(Unknown)***

In my first school that I worked, I did not receive a lot of support. Very few teachers reached out to me.

Factors of retention\support\coach

Cynthia ***(Unknown)***

When you came on that one day, you would listen to my woes. I just did not hold onto the frustrations.

You started coaching with us and that was very helpful. Even though you were there only one day of the week that helped tremendously.

When you weren't there, I would call you when I needed help.

Well.. I can say I am blessed because I started with you as my instructional coach. I tell you all the time that if you leave and go somewhere else, I am coming with you.

You do a good job of balancing your administrative and coaching roles. I agree with you Victoria, coaching is invaluable. I feel this in my heart that if it was not for my coach and my other support, I don't know what I would do because her support is invaluable. You always help me.

As Cynthia spoke, I did not realize that I was balancing administrative and coaching roles. As we talked about some of my roles and responsibilities as a coach, I found out that when I talk to them about their data or do a focus walk, the participants feel that is just part of an administrative duty. They do not see it as part of a cycle of coaching and teaching.

Victoria ***(Unknown)***

However, at the school of hard knox, I did not have thea confidence that I needed. But then comes you as my instructional mathematics coach. You gave me the support and confidence that I needed.

The support at my new school was great. You helped me to come out of my comfort zone. I felt comfortable with you as I took risks to try new strategies. Your role helped me get the confidence that I needed on order to find what works in the classroom and take risks. Sometimes lessons would not go well and we

would debrief and figure out why it went wrong and what to do to make it more effective. I would sometimes email you at two in the morning about an idea that I had for a lesson. I really love your support and relationship that we have.

Factors of retention\support\colleagues,peers

Cynthia ***(Unknown)***

I think about three to four years ago I was teaching in the trailer. The student behavior was awful. Each day was a different crisis. I would get so frustrated but I could talk to the other teachers who were on my planning period and I would feel better.

I talk to people to get it out of my system. I'll tell the story over and over and over until it makes me laugh.

I also could call Jonathan. I believe this support system is very beneficial.

Jill ***(Unknown)***

When I have challenging days, I usually tell someone about it too.

I cannot imagine where I would be if I had not had the support of the department. I appreciate the support that I have gotten.

Victoria ***(Unknown)***

One of the things that help me or got me to stay during that first year was the advice from one of my assistant pastors.

Factors of retention\growth

Victoria ***(Unknown)***

I am going to remain as long as I can see a light at the end of the tunnel.

Factors of retention\growth\personal

Cynthia ***(Unknown)***

Coming from corporate helps me put things in perspective

Although there are some challenging days in teaching, ultimately, at the end of each school year, I realize it was a good year and I want to stay.

Factors of retention\determination

Cynthia ***(Unknown)***

When I asked the teachers to write a narrative about the factors that influenced them to remain in teaching, all of them told their story of reasons why they came into teaching. That is why I stated that to understand why they have remained is to understand why they came into teaching. Cynthia does write more about the factors in her narrative. In the group interview, her answer was short. I did this to member check what was written and to check what I had gleaned from the written text. As I read their narratives, I immediately heard determination in all their voices. I also perceived that they all wanted to make a difference. The advantages of them all being second-career teachers is that bring a different outlook at teaching. Because they are so goal-directed and determined to reach their goals, they can and will withstand the stress, frustration, and joy of teaching.

My great grandmother taught English for forty years, my grandmother taught math for thirty-five years, and my mother taught for three years.

Cynthia does not state it explicitly but she is and still is a teacher due to the

tradtion of teaching in her family. From her comments, her family has had longevity in teaching as well.

The pressure of being a mathematics teacher is enormous. But I am not going to quit.

Jill ***(Unknown)***

When I came into teaching, I came on a mission.

I am struggling to meet the goals that I set out to accomplish.

The condition of my son maybe the determining factor on how long I remain in teaching. I would like to stay in teaching long term.

Jonathan ***(Unknown)***

Jonathan mentions that he comes from two generations of educators. His factor for retention may as well be his family tradition. However, as a teenager, he decided that he did not want to be a teacher. Jonathan also tells the story of how he became a teacher in the group interview. In his narrative, he spoke more passionately about his personal goals of finding solutions for the poor performance of minority students in math.

When I graduated from high school and college, I also said I am not teaching math. I was good at math, science, and computers and I knew exactly what I did not want to do. I did not want to be a teacher because I knew the pain and anguish.

no where in my bloodstream is the, I give up mentality. We just don't quit.

At the end of the day, I can say that I have remained because of the same military mindset, "I am not a quitter". On my corporate job, I was hired to be a problem solver. I was hired to solve these issues in this amount of time for this amount of money. That has been ingrained in me since I first started working in 1995. Fifteen years of solve the problem becomes my own personal passion. So it does not matter what the job is, just solve the problem.

I'll stay until uh...well my daughter is one (calculating) well for another fifteen years. I made a commitment to stay in teaching at least until my children are middle school students.

Victoria ***(Unknown)***

"Why did I stay?" My pastor told me that if I quit, then the students win, but if I stay, I win. I thought to myself, I am not a quitter. So I stayed.

Each time I get discouraged, I ask you for something different. When I experience the success, it gives me confidence and rejuvenates my determination to be better. I constantly tell myself that I can do this.

Factors of retention\determination\passion

Jonathan ***(Unknown)***

I asked the group to tell me of a challenging time during the past five years that tested their determination, job satifaction, and what made them stay knowing that they had other options, or did they?

Jonathan told us of a time he dealt with a student discipline problem. He actually had a student who threaten to harm him. The administration did not support Jonathan's way of handling the situation. He was given a written reprimand that was placed in his file. This was difficult for Jonathan and he agonized as to whether teaching was for him. Jonathan stated, "I did what I did because of my passion and I cannot compare my passion to someone's job

description. So I stayed."

Victoria ***(Unknown)***

I don't know when it happened but I now have that passion that most teachers have as they begin teaching. After ten years of teaching, I now tell people, "I love my job, and I love what I do."

It's real, it's not fake or phony but it took me awhile to get that feeling. I think it translates into the classroom. Students know if you have passion about what you do. That makes a difference. So I am here because I have that passion. Maybe it's finally in my blood now as Cynthia stated earlier

Factors of retention\determination\goal-directed

Jill ***(Unknown)***

I am in teaching because I want to inspire youth to excel in anything they choose.

Jonathan ***(Unknown)***

I am focused on finding ways to improve student achievement among minority students.

Project: New teacher retention.xsp
Analysis Framework: secondary mathematics teacher retention
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Jonathan is very determined to accomplish his goal of finding a way to improve student achievement among minority students. At the risk of sounding pestimistic, I tell him he will be teaching for a long time.

Factors of retention\job satisfaction

Jonathan *(Unknown)*

Jonathan mentions that he comes from two generations of educators. His factor for retention may as well be his family tradition. However, as a teenager, he decided that he did not want to be a teacher. Jonathan also tells the story of how he became a teacher in the group interview. In his narrative, he spoke more passionately about his personal goals of finding solutions for the poor performance of minority students in math.

The only thing that had stability that got my parents through ups and downs was education.

At the end of the day, I can say that I have remained because of the same military mindset, "I am not a quitter". On my corporate job, I was hired to be a problem solver. I was hired to solve these issues in this amount of time for this amount of money. That has been ingrained in me since I first started working in 1995. Fifteen years of solve the problem becomes my own personal passion. So it does not matter what the job is, just solve the problem.

Victoria *(Unknown)*

Right, it's rough but is some weird sort of way, I enjoy it. I think just being in the classroom with the students is great. It's the extra stuff; the administrative part that .....

Factors of retention\job satisfaction\stability

Jill *(Unknown)*

what profession would work well with me being a mother? I decided teaching would be a good fit for me.

There are two participants who had aspirations of being a teacher but were steered down different paths. My story is quite similiar to theirs. I did not know this until reading their narratives and conducting the focus groups. Jill feels she is on a mission to help students excel. This mission influences her decision to remain in teaching.

Factors of retention\job satisfaction\security

Victoria *(Unknown)*

I feel I have job security. As a teacher, especially mathematics, I don't have to worry about my job. I feel confident or I felt confident until the past three years when I saw they were laying off teachers.

Factors of retention\success

Cynthia *(Unknown)*

One way I define it is when my students were successful on the end-of-course test last year.

But what really makes me feel successful is when my students come back to tell me, like one of my students at a college in Florida, that I inspired them to be an engineer.

Cynthia as well as the other participants base their personal and professional success on the success of their students. Most educators would tend to agree with this sentiment.

I feel rewarded. I think that is what keeps me going.

Victoria *(Unknown)*

I would agree with Cynthia. The first thing that came to my mind was test scores.(All nodding their heads) Hmm Hmm. In addition to that, success for me is when like seeing the student struggle then they finally get it.

Factors of retention\success\personal

Cynthia *(Unknown)*

Project: New teacher retention.xsp
Analysis Framework: secondary mathematics teacher retention
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I always said I wanted to be a teacher and math is the only thing I thought I was successful at doing

I think to understand why these teachers have remained in teaching is to also understand their stories about why they entered the teaching profession.

Jonathan does not feel that a teacher can claim success if the performance is not repeated; therefore, knowing whether a teacher is successful in getting students to understand takes a while to realize. However, he is very sure about the student's success. Earlier I stated that the participant's success was contigent on the student's success. However, Jonathan illuminates a different perspective. As he explains his definition of success, it is as though his success is independent of the student's success.

Jill *(Unknown)*

My success is when students are making progress and feeling good about what they are learning. I feel a greater amount of success when I see my struggling student's light come on for them

I really feel successful when I reach my level 1 and level 2 students. They understand what is taught on a daily basis

Jonathan *(Unknown)*

As it relate to a professional, whether it is a teacher or any other profession, success would be identified as the ability to repeat performance.

Victoria *(Unknown)*

When the students feel comfortable and confident in their ability to learn mathematics that is when I feel successful as a teacher.

The successes of their students in class on a dail basis that each of the female participants mentioned is what keeps them going. Research states that when teachers feel they are making a difference, they are more apted to remain in teaching.

Factors of retention\success\student

Jill *(Unknown)*

The greater measure occurs when I give a test and they are successful on the test.

Jonathan *(Unknown)*

I would piggy back on that to say my version of success would be when the student who I work with can claim the ability. A lot of my environment in the teaching realm is focused on an environment where the students do not have a lot of confidence. So when the student can claim that ability that I can now add, subtract, and write and claim that skill set, that is a sign that the student is successful.

Project: New teacher retention.xsp
Analysis Framework: Teacher's Images
Generated on: 1/3/2011 8:27:03 PM

Growth

Cynthia *(Unknown)*

This image represents a colleague sharing information with another colleague. The women represent my math coach who shares all of her instructional resources with me. When she shares new ideas with me, my eternal light bulb goes off and my abilities are expanded. Working with my coach has made me grow as a teacher and allowed me to reach levels of success that I didn't always believe were possible.

Cynthia and I routinely collaborate about lessons and strategies. We often share articles about current research in education. I remember five years ago when I shared an article about self-paced lesson with Cynthia and Jonathan. She read the article and was so excited about it that she went to Texas to meet the author of the article. When we returned to school the following school year, Cynthia, Jonathan, and I embarked on implementing self-pace lessons in their classrooms.

Victoria *(Unknown)*

I was able to really mature as a teacher as a result of the model teaching from my instructional mathematics coach.

You helped me to reach the next level in teaching by providing constructive feedback. I was able to improve in areas that I was weak in or needed more professional development.

Victoria's images illuminated her interpretation of coaching to be a guide on the side. The modeling and feedback aspects of coaching is what moves a teacher forward in their own professional development.

Cynthia saw our relationship as a partnership whereas we dialogue and share information, ideas, and concerns about our craft.

Resource

Jill *(Unknown)*

My instructional coach can provide guidance on how to reach students and promote and provoke a greater interest for learning for the different learning styles. I look to my instructional coach to be able to provide direction in this regard.

Jonathan *(Unknown)*

It is the instructional coach's responsibility to equip and empower teachers with as many tools as possible.

The toolbox represents how the county does a very good job of equipping its coaches with a lot of different tools. You all go to training on a regular basis. You all have a nice toolbox. Now in turn, how you figure out as a coach which tool to use with which teacher is a mystery. Again, I don't know if the county equips you with that kind of decision making or if it's just your own personal style over the years you learned what works best with who.

Victoria *(Unknown)*

Victoria feels that an instructional coach needs to be equipped with many strategies that area proven to be effective. She stated that she benefited from the ideas and strategies that I shared with her. She feels she has been more successful as a result of implementing such strategies as, cooperative groups, numbered heads, etc.

Jonathan, Victoria, and I all chose a toolbox as an image of coaching. Their interpretation was that a coach symbolizes resources and strategies. I am thought to have a wealth of knowledge about strategies. My interpretation differs in the way that I feel my toolbox represents knowing which tool to use to coach different teachers. I look at the tools in my toolbox as instruments to fix, repair, or build. I must have the right tool for the right coaching job. Five years ago, I needed the hammer when coaching Jonathan because he thought of me as an outsider, "building b."

As I coach Jonathan now, I most often use a small mallet. Cynthia is so receptive to my ideas that I only need to use a putty knife when coaching her. I sometimes need to find something a bit stronger and lasting when I coached Victoria so I used a staple gun. Sometimes Jill forgot what I had shared or had not read my emails so I had to use a clamp when I coached her so that things would stay in place.

Project: New teacher retention.xsp
Analysis Framework: Teacher's Images
Generated on: 1/3/2011 8:27:03 PM

Cultivator/Filtrator

Jill *(Unknown)*

I see my instructional coach as a filter. He or she is someone who is very familiar with the requirements and expectations for the teachers and students. My instructional coach assists me with identifying what is important and strategies for accomplishing the massive things that are required of the students and me - with the students as the primary focus.

As I coach teachers, I try to remove those ineffective practices they have held onto for years and focus teachers on the task at hand.

Jonathan *(Unknown)*

The profession of instructional coaching is very much like the profession of farming; it is critical to first find the fertile area.

Before I coach a teacher, I observe he or she to assess their strengths and needs. After the observation, I know where I need to begin coaching the teacher. I think a farmer does the same thing before he plans to grow a crop, he must prepare the land.

Project: New teacher retention.xsp
Analysis Framework: Third focus about benefits of coaching
Generated on: 1/3/2011 8:29:10 PM

beneficial aspects of coaching

Jill *(Unknown)*

- It's a certain type of coach that makes the difference; one with certain characteristics.
- I asked Jill what type of characteristics and she replied all the ones we mentioned in our images and what you do.

beneficial aspects of coaching\modeling

Victoria *(Unknown)*

- I appreciated you modeling and sharing a new strategy in some staff development meetings. However, I better appreciated it when you modeled in the classroom. Having someone to do the research, model and share is a real asset. That makes the difference. If I didn't have a coach I would really have to budget my time to research and that would be stressful I think.
- The teachers really appreciate being able to spend more time teaching and preparing. My being resourceful and researching strategies for them improves their willingness to try new methods.
- What made a difference with me was you always sharing new things that were going on in mathematics. I remember the lesson on Singapore Math. That made a big difference with me because before you shared that I was stuck in a rut. I was in my own little world. It's great to have a coach to come in and say try this.

beneficial aspects of coaching\feedback

Jill *(Unknown)*

- Your support and attitude was always positive. Your feedback always helped me be better.

Victoria *(Unknown)*

- The observation and feedback are also aspects of coaching that has made a difference in my staying in teaching.
- Well that why I think you are good, because you always give us feedback
- So for clarity, I hear that the beneficial aspects of coaching are the modeling, support, and feedback. In coaching you observe to give feedback but it sounds like the observing has been the least beneficial for some of you.

beneficial aspects of coaching\support

Cynthia *(Unknown)*

- Coaching is beneficial because of the support you give me.
- Coaching has made all the difference for me. I always say that if you leave, I am leaving with you. I think every school should have an instructional mathematics coach. I can't imagine not having a coach.

Jill *(Unknown)*

- I see a coach as someone coming into the classroom to help you.

Jonathan *(Unknown)*

- To me personally, I think it would be a detriment to my continued personal growth if coaching was discontinued. However, it also depends on who the coach is.

Victoria *(Unknown)*

- I am still going through withdrawals without you now. I can't imagine what I would have done without you.

beneficial aspects of coaching\sharing/partnership

Jonathan *(Unknown)*

Project: New teacher retention.xsp
Analysis Framework: Third focus about benefits of coaching
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We started exchanging communication about research. That's when I said she is connecting with me. I am willing to do the work and once she puts me in the direction she wants me to go, she will trust me to do my job. Once we had that kind of relationship, we began to grow together.

Remember when I stated that I felt I symbolized "building B" for some of the teachers, well Jonathan's next statement confirms my thought. He stated that he thought I wore two hats, one from the county and one from my teacher experience. Earlier in my coaching of Jonathan, we mostly disagreed on many issues. I would suggest a strategy for a struggling student and he would tell me in no uncertain terms why the strategy would not work. From his statements, he saw me as someone totally disconnected to what would move our students forward. Jonathan's image of me being an outsider clouded his perception of my intentions until that day he saw me doing hall duty and conversing with the students. Then he says, "Then I saw and heard yo telling kids to get to class. That connected with me and I saw that you were intimately involved with the students and teachers at this school. That moment I connected with your investment and you still allowed me to throw a looping ball and see where it land.

Beautifully, the relationship has been great because the data supports what we have been doing. When you allowed me to do the whole reading and writing component in my class, it proved to be effective because all of my students passed the writing test. I respect you now because in the beginning you had the nice county hat on that said what the county says and does is perfect.

beneficial aspects of coaching\collaborative planning

Cynthia *(Unknown)*

I just want to say again that what has been beneficial for me from coaching is the planning. It has helped me grow as a teacher. You never shot down any of my ides. You always said;" Just give me time to process." You always listened to my ideas and you were very receptive to my ideas, just as Jonathan stated.

least beneficial aspect of coaching

Cynthia *(Unknown)*

The way the county has changed the nature of your job. I really can't think of any least beneficial thing.

But I do think the least beneficial aspect of coaching is when the county have you all do other things that have nothing to do with coaching.

Jill *(Unknown)*

And has nothing to do with children and it does not help children

least beneficial aspect of coaching\observations

Jill *(Unknown)*

I think sometimes the coach gets the wrong picture but don't care to ask to get clarification. Sometimes I feel I am in a no win situation because the new coach does not talk to me about the observation before he takes it to the administrator.

Jill agrees with Victoria that observations and feedback helps them to grow but when the observations become evaluative, the coach has lost their respect and trust.

least beneficial aspect of coaching\lack of power

Jonathan *(Unknown)*

I thought part of your role was a liaison between the teacher and the administrator. However, your suggestions are set a fire before you leave the administrator's office. I can see why teachers say this coach is of no benefit, he or she has no more power than a teacher.

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Thsi statement also confirms that Jonathan did not see me as a partner from the beginning but we have grown into a great partnership over the years.

You are doing all these different jobs, collecting all this data, and attending all these training, but your voice is mute. To me, they need to give you more impact and influence.

I don't care how much a person gets paid, there comes a time when you get tired of spinning your wheels. I respect you for your endurance. Somehow, the county needs to figure out how to get the teachers to buy in to what the coaches intend to do.

Victoria *(Unknown)*

Well, I don't have anything to add to that. I do believe coaches should have more power. I remember when my schedule was messed up, my new coaches would not to anything about it.

Support

Results 1/12/2011 12:05:15 PM

Project	Analysis Framework o	Heading Name (2)	Sample Name	Sample Characteristic Values	Commentary Text
1	coaching images focus	Coach support	Cynthia	Unknown	I never saw you as a
2	coaching images focus	Coach support	Cynthia	Unknown	I never saw you as a
3	coaching images focus	Coach support	Jill	Unknown	Your support helped
4	coaching images focus	Coach support	Jill	Unknown	Your support and atti
5	coaching images focus	Growth	Victoria	Unknown	I look at the filter as
6	secondary mathematics	Factors of retention\su	Cynthia	Unknown	I think it is very bene
7	secondary mathematics	Factors of retention\su	Cynthia	Unknown	I know if I did not hav
8	secondary mathematics	Factors of retention\su	Victoria	Unknown	In my first school tha
9	secondary mathematics	Factors of retention\su	Cynthia	Unknown	You do a good job of
10	secondary mathematics	Factors of retention\su	Jill	Unknown	On the first day that I
11	secondary mathematics	Factors of retention\su	Victoria	Unknown	However, at the sch
12	secondary mathematics	Factors of retention\su	Victoria	Unknown	The support at my n
13	secondary mathematics	Factors of retention\su	Cynthia	Unknown	I also could call Jona
14	secondary mathematics	Factors of retention\su	Jill	Unknown	I cannot imagine wh
15	secondary mathematics	Factors of retention\de	Jonathan	Unknown	Jonathan told us of a
16	Third focus about benef	beneficial aspects of c	Jill	Unknown	Your support and atti
17	Third focus about benef	beneficial aspects of c	Victoria	Unknown	So for clarity, I hear t
18	Third focus about benef	beneficial aspects of c	Cynthia	Unknown	Coaching is benefici
19	Third focus about benef	beneficial aspects of c	Jonathan	Unknown	Beautifully, the relati