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Special Education Teacher Retention: The Relationship Between Mentoring, Job Satisfaction and the Retention of Special Education Teachers

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SPECIAL EDUCATION TEACHER RETENTION: THE RELATIONSHIP

BETWEEN MENTORING, JOB SATISFACTION AND THE

RETENTION OF SPECIAL EDUCATION TEACHERS

by

ANGELA HORRISON-COLLIER

(Under the Direction of Kymberly Drawdy)

ABSTRACT

The causes of the teacher shortage are complex; however, the retention of special education

teachers is a significant contributor to this shortage. Some research has indicated that up to 9.3

% of special education teachers leave the field at the end of their first year of teaching and 7.4 %

move to general education yearly. Therefore, school districts face a continuous cycle of

recruitment, hiring, and induction. Because of the pivotal value of retention, school districts and

site level education leaders must take proactive steps to reduce the retention rate. The research

on teacher retention indicates factors such as salary, support; mentoring, responsive induction

programs, deliberate role design, positive work conditions, and professional development

positively affect retention. This mixed methods was an examination of data from the 2007-

Georgia Teacher Survey (Department of Research and Evaluation at the Georgia Professional

Standards Commission) to establish a link between mentoring, job satisfaction, and the retention

of special education teachers. Logistic regression analysis was used to evaluate the influence of

mentoring and job satisfaction on the outcome variable of interest, teacher retention. A sociocultural frame work was used draw the following conclusions: mentoring is most effective when it provides opportunities in the learning community for mentors and mentees to meet and share ideas with colleagues in a similar content area; relationships and support is the ultimate determining factor regarding intent; mentoring and job satisfaction can impact the intent to remain in the profession based on race, gender, and number of years teaching, for special education teachers.

INDEX WORDS: Special Education; Teacher; Retention; Mentoring; Job satisfaction; Sociocultural Theory

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DEDICATION

A good friend shared this with me as I struggled through this process: We are troubled on every side, yet not distressed; we are perplexed, but not in despair; persecuted, but not forsaken; cast down, but not destroyed, because all things work together for my good!

I dedicate this dissertation to my family and friends. First, to the woman who struggled as a single parent to ensure that her children understood the value of education, my mother Novella (Becky) Horrison; Mommy, I love you and miss you! To my daughter, Daphne your life has taught me that no weapon formed against me shall prosper; you are an awesome mother! To the other apple of my eye, your son and my grandson, Jerimia, thank you for showing me strength.

To Apostle Jacqueline Carter, words can never express the strength and the push you have provided me. The words you have spoken over and into my life have given me wings to soar as the woman, God called me to be. To those women, my sister in the spirit, you know who you are. All of you have encouraged me, pushed me, believed in me, and taught me the value of true friendship. Thank you for always having my back.

Finally to my sister Jean, brothers, Waco, Donnie, and Andrew, your love and support has blessed me over the years. My nieces and nephews, this is also for you, Auntie, love all of you. To my sisters, Miss Ann and Sadie, and my brother, Willie D., who started this journey with me but did not live to see me complete this process. My life is better because you were in it; my dreams have been fulfilled, because you believed in me. Thank you for just being you!

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CHAPTER 1

INTRODUCTION

"The pool keeps losing water because no one is paying attention to the leak.... We're misdiagnosing the problem as recruitment, when it's really retention.... We train teachers poorly and then treat them badly-and so they leave in droves" (Merrow, 1999).

Background of the Study

Each year schools across America face the fear of retaining teachers because the teaching profession has become much like a revolving door: as one teacher enters, another leaves. Yearly, thousands of teachers leave the profession or change schools in pursuit of better working conditions. About half of the teachers entering the teaching profession will leave their jobs in the first 5 years of teaching (Lambert, 2006). Data from the U.S. Department of Education (2003) indicated that as many as 25% to 30% of beginning teachers leave the profession during the first 2 years in the classroom. Andrews (2009) reported that of the teachers who leave the profession annually, 2% retire. The large majority of teachers who leave annually do so because of job dissatisfaction and the pursuit of a new career. An accumulation of teaching personnel data from the Alliance for Excellent Education (2005) revealed that teacher retention is a costly expense to individual states and to the nation. Based on data from a national survey conducted in 2006-2007, the National Commission on Teaching and America's Future (NCATF) estimates that teacher turnover and attrition costs the nation's school districts about $7 billion annually for the recruiting, hiring, and training of new teachers (NCATF, 1996).

In 2009, Georgia was predicted to replace 51,498 teachers, an equivalent of more than

50% of the current workforce (Alliance for Excellent Education, 2005). The Alliance for Excellent Education reported that the cost of teachers in Georgia leaving the profession is estimated at more than $81 million per year. The number of new teachers hired has maintained a steady increase since Fiscal Year 2004. In Fiscal Year 2007, 67% of the teaching population in Georgia consisted of new teachers hired to replace teachers who left the classroom.

Improving teacher satisfaction is paramount, especially relative to new teachers. The National Center for Educational Statistics reports that new teachers leave the profession within their first 5 years of teaching to pursue alternative careers. Another 25% leave because they are either not interested in teaching any longer or they are dissatisfied with the career. Teacher job satisfaction is predictor of teacher retention; Woods and Weasmer (2002), indicated that such factors as benefits of collegial investment, shared leadership, support meetings, and mentoring lessen job dissatisfaction. Bolger (2001) reported that satisfaction, in general, is linked to retention. Teacher satisfaction reduces attrition, enhances collegiality, improves job performance, and has an impact on student outcome. Job satisfaction (Bolger, 2001) refers to the attitudes and feelings people have about their work. Positive and favorable attitudes towards the job indicate job satisfaction. Negative and unfavorable attitudes towards the job indicate job dissatisfaction. Job dissatisfaction is a factor that impacts teacher retention causing a mass exit of teacher from major content fields, especially those hard-to-fill fields.

In 2006, there were a number of fields in education experiencing shortage. During the Fiscal Year 2006, the shortage fields identified includes, but were not limited to, special education, science, mathematics, and foreign languages (Georgia Educator Workforce -Supply, Demand and Utilization Repot, 2006). The U.S. Department of Education (2003) has also

identified fields that have a shortage of teachers.   One field that has the lowest teacher retention rate is special education. According to Brownell, Hirsch, and Seo (2004) a dramatic shortage exists with special education nationwide. Many special educators do not survive the path from hopeful beginner to highly qualified, experienced teacher. Many beginning special educators leave their positions after the first year (Griffin, Winn, Otis-Wilborn, & Kilgore, 2002), and 20% within the first 3 years (Whitaker, 2001). According to Billingsley (2004) keeping good special educators has been a long-standing problem in special education. Across the country, 98% of school districts indicated special education teacher shortages; the projected need for these teachers by 2008 exceeded 135,000 in 2004 (Center on Personnel Studies in Special Education, 2005).

According to Billingsley (2004) the retention of special education teachers is a critical concern in schools across the nation. Billingsley states that, prior to the concern about the national teacher shortage, special educators were voicing concerns about higher burnout and attrition rate as compared to those teachers in general education. In the US annually, the turnover rate for special educators is 20% as compared to the turnover rate of general educators at 13%. Researchers Plash and Piotrowski (2006) stated that by the year 2010 there will be a need for 611,550 special education teachers in the US. Unfortunately, about 13.2% of special education teachers vacate their positions annually; 6.0% leave the teaching profession entirely, while the remaining 7.2% migrate to general education positions (Plash & Piotrowski, 2006). Brownell et al. (2004) concluded that few problems in special education have been as vexing as the chronic under supply of special education teachers.

Special educators encounter a number of factors that impact retention. Stempien and

Loeb (2002) compared the job satisfaction of special education and general education teachers. They reported that special education teachers are the most dissatisfied when compared to general educators. Specifically, stress and frustration, both from within and outside of the classroom, were found to be associated with dissatisfaction of special education teachers (Stempien & Loeb, 2002). The dissatisfaction of novice teachers has a major impact on their retention, according to Woods and Weasmer (2004); they leave the field within 5 years due to job dissatisfaction. A survey in 2005 of first year teachers in the New York public school district cited job dissatisfaction as the main reason for leaving or considering leaving (Boyd, Grossman, Ing, Lankford, & Wyckoff, 2009). Whitaker (2001) surveyed first year Special Education teachers and reported job satisfaction as the main reason for leaving or considering leaving. The five factors reported by Whitaker related to the difficulties novice special education teachers face their first year of teaching: (a) An inability to transfer learning from theory into practice; (b) a lack of preparation for many of the difficulties and demands of teaching; (c) reluctance to ask questions or seek help; (d) the difficulty of the teaching assignment and the inadequate resources provided; and (e) unrealistic expectations and the associated loss of efficacy. Results from research on special education teacher mentoring indicates that strong teacher mentoring programs supported by other teacher induction processes result in significantly higher retention rates for special education teachers than induction programs without mentoring (White & Mason, 2001; Whitaker, 2001). Woods and Weasmer (2004) suggest that mentoring strategies increase job satisfaction; which aids in the overall retention of teachers.

Teacher mentoring programs are now perceived as an effective staff development approach for beginning teachers. When school districts establish teacher mentoring programs

they provide school novice teachers with a strong start at the beginning of their careers. Mentoring can be a valuable process in educational reform for beginning teachers. Mentoring professional development programs have been linked to the increasing likelihood that teachers would remain in the profession (Blank, Kershaw, Suter, & Humphrey, 2004). Mentoring is a highly valued practice and it is a recognized method used by many educators to share information and knowledge. Mentoring is an integral component of an effective and sustained induction program, a one-on-one process where an experienced teacher helps guide, advice, and support (Ingersoll, Richards, & Smith, 2004). The use of techniques such as reflective activities and professional conversation can assist in improving teaching practices. (Ingersoll, Richards, & Smith, 2004). Gupta (2008) indicated that "mentoring can also help establish an educational system's quality standard, allowing a school to ensure compliance with prevailing benchmarks" (p. 1).

One of the key benefits of mentoring is that it can increase novice teacher retention in the teaching profession (McCormick, 2001). According to the National Education Association (Brown, 2003) new teachers who participate in induction programs like mentoring are nearly twice as likely to stay in their profession. Brown states that some researchers position on mentoring programs is that they can cut the dropout rate from roughly 50% to 15% during the first 5 years of teaching. Another benefit of teacher mentoring, according to Gupta (2008), is that it is "one of the best interactive systems that mentors, mentees and the educational system can actively participate in. It helps to create a quantitative program to help train new teachers, develop more experienced educators and improve the technique and methods used in instruction" (p. 1).

Statement of the Problem

The causes of the teacher shortage are complex; however, the retention of special education teachers is a significant contributor to this shortage (Billingsley, 2004). Several states report that special education teachers experience higher rates of attrition than their general education counterparts (Katsiyannis, Zhang, & Conroy, 2003). Some research has indicated that up to 9.3 % of special education teachers leave the field at the end of their first year of teaching and 7.4 % move to general education yearly (Boyer & Gillespie, 2000). Therefore, school districts face a continuous cycle of recruitment, hiring, and induction. Because of the pivotal value of retention, school districts and site level education leaders must take proactive steps to reduce the retention rate. Research on teacher retention indicates factors such as salary, support, mentoring, responsive induction programs, deliberate role design, positive work conditions, and professional development positively affect retention. Stempien and Loeb (2002) reported negative factors such as stress and frustration, both from within and outside of the classroom, are associated with teacher job satisfaction. Teacher job satisfaction is a predictor of teacher retention according to Woods and Weasmer (2004), while factors such as benefits of collegial investment, shared leadership, support meetings, and mentoring lessen job dissatisfaction. Recent studies by Blank, Kershay, Suber, and Humphrey (2004) also indicated that mentoring positively impacts the retention of special education teachers.

Over 40 years ago, the state of Georgia implemented a statewide new-teacher induction program (Young, 2007). The Georgia Beginning Teacher program, initiated in 1980, was one of

the first new teacher programs in the US. The interpretation of how these mentoring programs were to be implemented was left to each school district. In Georgia, higher education institutions have been involved in developing resources for new teacher support. Albany State University, the University of Georgia, and Valdosta State University founded the Georgia Systemic Teacher Education Program in 2000, which has a BRIDGE (Building Resources: Induction and Development of Georgia Educators) component. This is a peer-reviewed, interactive, online resource and mentoring site for teachers (AASCU, 2006). These mentoring programs have been geared specifically to general education teachers. What is lesser known is the impact mentoring has on retention of special education teachers. Therefore, a gap exists in the literature relative to the relationship of mentoring and the retention of special education teachers in the State of Georgia. The high burnout rate of special education teachers in comparison to general education teachers is one of the reasons why it has become increasingly important for school districts to develop deliberately designed mentoring programs to retain special education teachers. As school districts face budget shortfalls, it has become increasing important for districts to focus on the financial impact replacing teachers has on their overall budget. Another reason school districts must focus on teacher retention is because of the impact it has on the human and financial resources. This study is important because it provides school leaders with what special education teachers constitutes an effective mentoring program that lead to their overall job satisfaction and intent to remain in the field. As well, a link between mentoring, job satisfaction and the retention of special education teachers is established. The literature indicates that mentoring can have a direct influence on special educators' commitment to the profession and an indirect impact on the teacher's job satisfaction and intent to leave.

Research Questions

The research questions were designed to answer the overarching question regarding the relationship between mentoring, job satisfaction and the retention of special education teachers. The specific questions are:

RQ1. Does the participation in a mentoring program have any effect job satisfaction?

RQ2. Does the presence and or length of a mentoring program have any effect on a special educator's retention?

RQ3. Does the perceived quality of a mentoring program have any effect on a teacher's plan to remain in special education?

Conceptual Framework

School leadership is defined as the identification, acquisition, allocation, coordination, and use of the social, material and cultural resources necessary to establish the conditions for the possibility of teaching and learning. Leadership involves mobilizing school personnel and clients to notice, face, and address the task of changing instruction as well as harnessing and mobilizing the resources needed to support this process. We know, for example, that schools with shared visions and norms about instruction, norms of collaboration, and a sense of collective responsibility for students' academic success create incentives and opportunities for teachers to improve their practice (Bryk & Driscoll 1985; Newman & Wehlage, 1995). Social affiliations and sense making norms have been shown to be crucial factors for success of any innovation (Billett, 2006).

The retention of teachers, specifically special education teachers, can at times appear difficult to measure. The literature regarding mentoring, job satisfaction, and retention has a

common denominator: effective leadership that is innovative and focused on organizational learning. This view of organizational learning is useful regarding the problem of how school districts learn to support teachers' professional learning. The key to understanding teacher learning as a sociocultural phenomenon is the assumption that their learning is constructed through and is visible in the discourse or the way people communicate. Teacher discourse occurs in macro-context, in organizations and institutions such as departments and schools, and in micro-contexts at a particular time, in a particular place, with particular participants. As well, it occurs in department meetings or a conversation between teachers (Jurasaite-Harbison & Rex, 2010).

Sociocultural theories of learning that have emerged over the past two decades (Engestrom, 1995, 2001; Lave & Wenger, 1991; Rogoff, 1994; Wenger, 1998) characterize learning in ways that are relevant to a social practice stance on organizational learning. These theories begin with the assumption that learning is situated in everyday social contexts and that learning involves changes in participation in activity settings or communities, rather than the individual acquisition of abstract concepts separate from interaction and experience (Rogoff, Baker-Senne, Lacasa, & Goldsmith, 1995). Taking learning as an inherently social phenomenon, sociocultural theories suggest that analyses of collective learning move from individual's heads (Simon, 1991) to units of participation, interaction, and activity (Engestrom 1999; Lave & Wenger, 1991; Rogoff, 1995). Sociocultural theories of learning imply "the simultaneous transformation of social practices and the individuals who participate in them, and thus the social and individual dimensions of learning are mutually constitutive" (Boreham & Colin, 2004, p. 308).

As we formulated the idea that the a sociocultural theory, being linked to leadership, specifically to school leaders, an apparent link between distributed leadership and sociocultural theory was developed. Spillane, Halverson, and Diamond's work on distributed leadership (Spillane & Halverson) provided a link between leadership and social distribution of task enactment. According to Spillane, Halverson and Diamond, at one level a distributed perspective presses us to identify (and explore the enactment of) leadership tasks as performed by multiple formal and informal leaders consistent with scholarship, which suggests that school leadership reaches beyond those in formal leadership positions (Gronn, 2000,1999; Heller & Firestone, 1995; Leithwood et al., 1997; Polite, 1993; Ogawa & Bossert, 1995). A distributed view of leadership incorporates the activities of multiple individuals in a school who work at mobilizing and guiding school staff in the instructional change process. The distributed perspective focuses on how leadership practice is distributed among positional and informal leaders as well as their followers. Understanding how leaders in a school work together, as well as separately, to execute leadership functions and tasks is an important aspect of the social distribution of leadership practice. The social distribution of leadership means more than acknowledging the division or duplication of labor in the enactment of leadership functions and tasks (Heller & Firestone 1995). A distributed perspective presses us to consider the enactment of leadership tasks as potentially stretched over the practice of two or more leaders and followers.

The social distribution of leadership practice involves more than developing additive models that capture the "amount" of leadership or that are inclusive of the work of all leaders in a school (Pounder, Ogawa, & Bossert, 1995). It involves understanding how leadership practice

is stretched over the work of various school leaders and exploring the practice generated in the interactions among these individuals. Therefore, distributive leadership that is stretched to encompass teacher leaders who serve as mentors within the school community will sustain and empower all recipients of this leadership practice.   This collective approach that moves from individual leadership to distributive leadership creates opportunities for enhanced participation and practices amongst teacher leaders and those they mentor. Drawing on Vygotsky sociohistorical (Vygotsky, 1978) notions of development describe learning and change as the internalization and transformation of cultural tools that occur as individuals participate in social practice. We can then conclude that a shift in leadership that is distributive (stretched) to teacher leaders as mentors can and will transform the retention of teachers.

Importance of the Study

The U.S. Department of Education estimates that 2 million new teachers will need to be hired over the next 10 years. Data from the National Center for Educational Studies indicate that 6% of nation's teachers leave the profession with the first year and 20% of all new hires leave within 3 years. The dissatisfaction of novice teachers has a major impact on their retention, according to Woods and Weasmer (2004); they leave the field within 5 years due to job dissatisfaction. According to the National Education Association (NEA), new teachers who participate in induction programs like mentoring are twice as likely to stay in the profession. It is believed that mentoring programs can cut the dropout rate from roughly 50% to 15 % during the first 5 years of teaching (Brown, 2003).

The shortage of special education teachers is a national concern that affects all regions of the US; 98% of school districts nationwide have shortages (Bergert & Burnette 2001; Boyer &

Gillespie 2000). Special educators encounter a number of factors that impact retention. Job

satisfaction has been linked to the retention of special education teachers as well as general

education teachers. Stempien and Loeb (2002) compared the job satisfaction of special

education and general education teachers; they reported special education teachers as being the

most dissatisfied. Results from research on special education teacher mentoring shows a

correlation between teacher mentoring programs and the retention rates for special education

teachers. Some mentoring programs achieved a 5 year teacher retention rate as high as 80%

(White & Mason, 2001; Whitaker, 2000).

This study is important for three reasons: one, it will provide the school district with

relevant information regarding mentoring programs and their effectiveness; two, it will identify

what special education teachers perceive constitutes an effective mentoring program, and three, it

will provide insight on the impact such programs have on the teachers' job satisfaction and plans

to remain in special education.

Procedure

This mixed methods study was implemented with survey research to explore existing data

from a web-based state-wide questionnaire. A mixed methods approach is one in which the

researcher tends to base knowledge claims on pragmatic grounds, (e.g., consequence-oriented,

problem-centered, and pluralistic). It employs strategies of inquiry that involve collecting data

either simultaneously or sequentially to best understand research problem. The data collection

also involves gathering both numeric information (e.g., on instruments) as well as text

information (e.g., interviews) so that the final database represents both quantitative and

qualitative information. Quantitative research employs strategies of inquiry such as experiments

and surveys, and the collection of data on predetermined instruments that yield statistics data. Qualitative strategies of inquiry include narratives, phenomenologies, ethnographies, grounded theory studies, or case studies. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data (Creswell, 2012). The existing data from the 2007- Georgia Teacher Survey developed by the Department of Research and Evaluation at the Georgia Professional Standards Commission will be used to establish a relationship between mentoring, job satisfaction, and the retention of special education teachers. The sample consisted of those special education teachers with Georgia educational certification, and those who responded to items II, III, IV, and V of the Georgia Professional Standards Certified Teachers survey. The ranking and response to these items is the base for determining the target sample.

The study utilized existing and archived data. The data was acquired from the targeted sample as determined from the Georgia Professional Standards Teacher Survey (Appendix B). Access to the data at Georgia Professional Standards Commission was provided by Dr. Gerald Eads, one of the original researchers. The data for this project was accessible under level three of the Professional Standards Commission policy. Level three places limits on fields within records. Information protected by state and federal law is excluded from access at this level, such as an educator's name, social security number (SNN), certificate identification number (CIN), address, and other personally identifying information. At this level random personnel codes (RPC) may be assigned to record in place of certificate holder's name, SSN and CIN. RPCs are computer-generated and contain no embedded meanings.

Logistic regression analysis was used to evaluate the relationship between retention and the independent variables, mentoring and job satisfaction. Logistic regression is based on odds. The odds of an event occurring is the ratio of the two possible outcomes, the event occurring or not occurring. Multiple logistic regression is used when several independent variables exist predicting the dependent variable (University, 2007). The resulting output provides insight regarding the predicative significance that mentoring and job satisfaction have on teacher retention, specifically, special education teachers. The data analysis provides a suggested causal relationship between mentoring, job satisfaction, and the retention of special education teachers. Because a causal relationship cannot be determined in regression statistics, the output is denoted by the significance level. If the significance is .05(or less), then it is considered significant. If the significance level is .05 and .10 then it is considered marginal (University, 2007).

Limitations of the Study

The study was focused on the relationship between mentoring and special education teacher retention as identified by special education teachers. The study has the following limitations:

1. School district recruitment efforts that include such things as incentive, signing bonuses and subsidized education benefits will not be discussed in this study.

2. The study will not include special education teachers who do not have a clear renewable certificate.

3. Limited information exists on the topic of mentoring, job satisfaction, and special education teacher retention in the state of Georgia; therefore, interpretations of the data and findings will be purely subjective and limited to the belief of those teachers identified in the

study.

Delimitations of the Study

The researcher had no control of the following:

1. The individual beliefs, perceptions and opinions of participants.

2. Factors such as salary, paperwork, discipline and burn-out factors that affect special education teacher retention.

3. The current reduction in workforce as a result of the state and federal economy.

Definition of Terms

Job Satisfaction

Job satisfaction refers to the attitudes and feelings people have about their work. Positive and favorable attitudes towards the job indicate job satisfaction (Bolger, 2001).

Job Dissatisfaction

Job dissatisfaction refers to negative and unfavorable attitudes towards the job (Bolger, 2001).

Mentoring

Mentoring is a one-on-one process where an experienced teacher helps guide, advice and support (Ingersoll, Richards, & Smith, 2004).

Retention

 In the literature on turnover and retention, the general term turnover is used as an umbrella term to describe "the departure of teachers from their teaching jobs" (Ingersoll, 2001, p. 500).

Attrition

Teacher attrition is a component of teacher turnover (i.e., changes in teacher status from year to year). Teacher turnover may include teachers exiting the profession, but may also include teachers who change fields (i.e., special education to general education) or schools. The rates of attrition often depend on this definition (Boe, Bobbit, & Cook, 1993). Researchers often use the term attrition to refer to the phenomenon of teachers leaving the profession, and the term migration to describe the transfer of teachers from one school to another (Ingersoll, 2007).

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Summary

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National research has estimated that as many as 25-30% of beginning teachers leave the profession during the first few years in the classroom (U.S. Department of Education, 2003). As a result, over the past 10 years school districts have struggled to recruit and maintain teachers. According to the Alliance for Excellent Education (2005), an accumulation of teaching personnel data reveals that teacher retention is a costly expense to individual states and to the nation. The National Commission on Teaching stated that the teacher shortage is a symptom of a larger problem: the problem of retaining teachers. Prior to developing national teacher shortage, educators were voicing concerns about higher burnout and attrition rate in special education.

In the state of Georgia, of the 12,507 new teachers hired in fiscal year 2003, 8,627 (68.9%) replaced teachers who did not return to any Georgia public classroom in fiscal year 2003. The literature also indicated that there are other teacher critical areas throughout the country, but that special education teachers are the most difficult to hire and retain. There appears to be a body of research that indicates factors that influence teacher retention from salary to support. The literature also indicates a direct correlation between mentoring and an indirect

correlation with job satisfaction and teacher retention.

Leadership that supports the retention of special education teachers should embody the concepts and principles of the sociocultural theory. Leadership practice these principles through distributive leadership creates a foundation of support stretching leadership to veteran teachers who serve as mentors. These mentors create norms of collaboration and support in the educational environment. Leadership involves inspiring followers to commit to a shared vision and goals for an organization, challenging them to be innovative problem solvers, and developing follower leadership capacity via coaching, mentoring, and provision of both challenge and support (Bass & Riggio, 2006). This study supports the hypothesis that a relationship does exist between mentoring, job satisfaction, and the retention of special education teachers.

CHAPTER 2

REVIEW OF LITERATURE

Mentoring and job satisfaction have been viewed as two key factors that impact teacher retention. Woods and Weasmer (2004) suggest that mentoring strategies increase job satisfaction for teachers, which may aid in the overall retention of teachers. Blank, Kershay, Suber, and Humphrey (2004) indicated that mentoring positively impacts the retention of special education teachers. Mentoring programs raise retention rates for new teachers by improving the new teachers' attitudes, feelings of efficacy, and instructional skills because of the supportive relationships developed through the mentoring process. The sociocultural perspective of mentoring reinforces the sense of self-efficacy and connectivity that teachers, especially special education teachers, need to possess to remain in the teaching field. Mentoring, when viewed through the lens of the sociocultural perspective, becomes the bridge that connects job satisfaction and mentoring.

This review of the literature is intended to create a foundation to look at mentoring from the sociocultural perspective, explore the problem, retention, and review the solution to retention, mentoring, and job satisfaction. The review is intended to enable conclusions regarding the impact mentoring and job satisfaction has on the retention and intent of special education to teachers.

Sociocultural Perspective

Sociocultural is an emerging theory in psychology aimed at exploring the important contributions that society makes to individual development. This theory enables researchers and others to stress the interaction between people and the culture in which they live. Sociocultural

theory is based on the notion that learning and knowledge are situated within the context in

which they occur (Alfred, 2002). There are three main elements of sociocultural theory: culture,

context, and community (Alfred, 2002). According to Alfred, learning cannot be viewed as

context-free and occurs through an individual's cultural lens. Sociocultural theory is a

recognition of societal heritage, individual efforts, and social actions as inseparable "as are the

forest and the trees" (Rogoff, 1990, p. 25).

The origins of the socio-cultural perspective on educational and psychological

phenomena are based on three important soviet researchers in the early 20th century who founded

a socio-historical school of psychological processes: Alexander R. Luria, Lev S. Vygotsky, and

Alexei N. Leont'ev. Following the work of these historical psychologists, four sociologists,

Cole, Scribner, Lave, and Rogoff completed studies to investigating socio-cultural influences on

cognitive development and the role of the social communities on learning activities. These

sociologists were especially interested in the influence the social environment has on individual

learning activities and one's participation in social communities. For instance, Lave conducted

several studies on the phenomenon of apprenticeship in communities of practice. These studies

provided insight on an individual's level of participation in community development expertise.

Through increased involvement in communities, individuals have access to acquire and use

resources available through their participation in these communities. One of the goals of

mentoring is to support new members in the community by increasing their knowledge and in

involvement in the community.

When reconsidering mentoring through the lens of the sociocultural theory as the

interaction between developing people and the culture in which they live, learning communities

become paramount in the development and retention of teachers. In recent years, educational research has developed a "learning-communities" approach to education. In a learning community approach, the educational goal is to advance collective knowledge in a way that supports the growth of individual knowledge (Bielaczyc & Collins, 1999; Scardamalia & Bereiter, 1994). The goal of educational practice was community building among its members. Learning is conceptualized as a growing sense of belonging to this community. Characteristics of social learning that occurs in participatory systems are elements such as action, reflection, communication, and negotiation. The joint goal in a learning community approach is to foster the emergence and growth of these elements among its members to participate in cultural activities of the community. It is important that each member take responsibility for participation and community building. In a learning community approach, the learner's identity is formed through participation. The members become who they are by being able to play a part in the relations of engagement that constitute the community (Wenger, 1998).

The importance of legitimate participation in the learning community is supported by the work of Street (2004) about how mentors guide newcomers into a professional community of learners. Street's professional development project, the Effective Mentoring in English Education (EMEE) project was an effort to understand how teachers learn and how mentors can support their learning during the student/semester. The EMMEE participants included 15 experienced teachers and the student teachers assigned to them to participate in the project. The project documented their semester long mentoring experiences. Street's social view of learning to teach was an exploration of the sociocultural theory in terms of the apprenticeship model for considering how new teachers learn in schools. Street examined Rogoff's (1991) apprenticeship

model view of learning and how it could be applied to new teachers who were negotiating a complex set of social relationships while learning in complex school settings. Street suggested that when novice teachers first arrive in schools, a great deal of support and guidance is provided. Street reported that without the ability to work closely with school-based mentors and to discuss issues of the practice, new teachers may never develop the ability to solve problems independently. The social transactions between new teachers and their more expert mentor teachers are crucial as newcomers begin to see themselves as members of the teaching profession. Street stated that "rather than seek a prescriptive method or program for mentoring new teachers, what may prove helpful is a deeper exploration of the social and cultural learning experience of new teachers (p. 10). Street concludes that a teacher learning to teach is in a highly social and dynamic space. Understanding the social learning experience between new teachers and their more experienced school-based mentors may help inform those who are in charge of guiding new teachers. The results of this study indicated that it was the school-based mentor who was seen as the main source of cultural and professional knowledge. This further supported and validates mentoring as a key component in the retention of teachers.

Menegat's study (2010) on mentor/protégé interaction and the role of mentor training within a novice teacher mentoring program drew upon the theories articulated by Vygotsky (1978) and Tharp and Gallimore (1988) to provide a foundation for novice teacher mentoring. Tharp and Gallimore (1988) extended Vygotsky's zone of proximal development (ZPD) to include adult skill acquisition. They proposed four ZPD phases through which adults move: (a) Learning with the assistance of more experienced individuals; (b) learning acquired through

increased assistance provided by self; (c) the internalization of learning; and (d) the acquisition of learning combined with an awareness of when to seek additional assistance.

Menegat's research (2010) was an examination of the mentor/protégé interaction in a mentoring program facilitated by the New Teacher Center (NTC) through the Oregon Department of Education. Menegat concluded that the theories articulated by Vygotsky (1978) and Tharp and Gallimore (1988) provide a foundation for novice teacher mentoring. The concept of adult learning through the assistance of others and emerging as an independent yet assistance-seeking learner constitutes the basis of effective mentoring. The practice, as conceived by the researcher, involves the transition of novice teachers from pre-service to in-service and results in skilled and self-directed teacher learners, which aligns with the theoretical ideas set forth by Vygotsky and Tharp and Gallimore. Findings confirmed the benefits of training mentors, the value of formal mentoring programs, the increased levels of confidence novice teachers attribute to mentoring, and the importance of positive mentor/protégé relationships. From this study we can conclude that when teachers who are culturally connected and supported in a community of learners there is a greater chance they will remain in the teaching field.

Teacher retention and the effectiveness of induction programs on a novice teacher's decision to stay in the profession were viewed through the lens of sociocultural theory by McNabb (2011). Case studies of six novice teachers located in two high schools in the same Midwest suburban school district in Missouri were studied to investigate the effectiveness of a teacher induction program on transitioning and retaining novice teachers at the suburban secondary level. As a framework for the study, sociocultural theory was used as a means of

analyzing the practice of policy with an orientation towards cognitive functioning and human development (Thorne, 2005). McNabb suggested that the sociocultural theory offers a "framework through which cognition can be investigated systematically without isolating it from social context or human agency" (Thorne, 2005, p. 393). McNabb further indicated that viewed this way, mentoring reveals benefits for teacher education practices and provides insight into "innovations based on close collegial partnership with peers, providing a genuine space for inter-subjectivity, collaborative thinking and knowledge co-construction" (Musanti, 2004, p. 15). This socially constructed view of mentoring suggests that "learning should be participatory, proactive, communal and collaborative" (Cornu, 2005, p. 357). With this information, a mentor may see the aspects of communication and reflection as key tools to guide them in thoughtful decision-making for their mentees. McNabb indicated that by viewing mentoring data through the sociocultural lens, a process of experiential learning conducted within a social learning context is revealed. Mentorship, in this context, necessitates engagement in active learning focused on reflective dialogue and conversation (Bruffee, 1999; Eraut, 2004; Pitton, 2006; Rix & Gold, 2000) rather than a training process (Carroll, 2006; Harrison, Lawson, & Wortley, 2005). McNabb asserted these socially constructed components are essential to successful mentoring programs as "mentors guide others during periods of transitions and identity formation" (Shank, 2005, p. 80). Mentors support individual teachers as they help build strong professional cultures dedicated to improving teaching and the development of change agents skilled at pedagogical practice and partnerships (Hargreaves & Fullan, 2000).

McNabb further concluded that by looking at mentoring in the social context, sociocultural theory provides the lens through which dialogue about how the current induction

and mentoring process promotes social and cultural critique. Podsen (2002) suggests that if

schools are to retain quality teachers, schools must address retention risk factors such as needs

for acceptance into the community and possible isolation. Podsen posits that one way to

minimize these risks and retain quality beginning teachers in the profession is through beginning

teacher induction. Beginning teacher induction should include practices that provide support and

training and help new teachers acculturate into the school community and profession.

The Problem: Retention

Teacher retention has been the subject of much study in recent years. Studies on teacher

retention demonstrate that some teachers are both resilient and persistent, remaining in the

profession despite being confronted with the same challenges and obstacles of those who leave

(Yost, 2006). In a review of literature on teacher resiliency, Bobeck (2002) contends that five

primary factors are responsible for teachers remaining in the field despite the challenges they

face: (a) Relationships (mentoring programs, administrative and parental support); (b) career

competence and skills; (c) personal ownership of careers (ability to solve problems, set goals,

and help students); (d) sense of accomplishment (experiencing success); and (e) sense of humor.

Although all beginning teachers have some of the same needs and concerns, certain additional

needs and concerns are specific to beginning special education teachers. Results from a series of

focus groups and from a survey of beginning special education teachers indicated that they

needed support in the following areas: system information related to special education, emotional

support, system information related to the school, materials, curriculum, and instruction,

discipline, interaction with others, and management (Whitaker S. D., 2001).

According to Cochran-Smith teacher shortages are not new. Two things are new: the requirement that teachers in all schools be highly qualified, the realization that it is not so much teacher recruitment that is the problem in staffing the nation's K-12 schools, but rather teacher retention. There is growing evidence that, similar to every other problem that plagues the nation's schools, the problem of teacher retention is most severe in hard-to-staff schools. The Cochran-Smith frame of thought goes back to 1999 in an article from Education Week (Merrow, 1999) that reported recruitment was both the "wrong diagnosis" and "phony cure" (p. 38) for teacher shortage. The Teacher Follow-up Survey (TFS) that defines attrition and migration behaviorally by tracking changes in an individual teacher's employment status from one year to the next) from the school years 1999 to 2001 indicated that 7.4% of all public school teachers left teaching employment, whereas as 7.7% moved to different schools for a total of 15.1% at the school level attrition and migration combined (Lueken, Lyter, & Fox, 2004). By 2003, the National Commission on Teaching and America's Future announced that teacher retention was a "national crisis" (p. 21). In 2004, Ingersoll argued that the crux of the retention problem was the teacher turnover rate, or the number of teachers per year who move from one teaching job to another or leave teaching altogether. Ingersoll concluded the sheer size of the teaching force coupled with its annual turnover rate (about 14%) means that almost one third of the teacher workforce (more than 1 million teachers) move into, or between schools in any given year. Teaching has become a revolving door swinging shut behind an unusually large number of those in the early years of teaching, with as many as 46% of new teachers leaving the profession by the end of 5 years.

The financial impact that teacher turnover has on school districts is at times overwhelming. In a 2000 study to estimate statewide teacher turnover costs, the Texas Center for Educational Research found that schools in Texas spent between $329 million and $2.1 billion dollars on teacher turnover every year, based on an annual statewide 15.5% turnover rate and depending on which of five industry models used in the calculations (Texas Center for Educational Research, 2000). The most conservative model took into account the number of leavers and their salaries, the number of applicants and interviews for the opening, and the organization's size. It then generated a per-teacher turnover cost estimate equal to 25% of the departing teacher's salary and benefits. Other models include estimates of separation costs, training costs, vacancy costs, and learning curve or productivity costs, and ranged as high as 200% of a departing teacher's salary. When researchers laid aside industry models and conducted their own empirical research on turnover costs in three Texas districts, they found that the per-teacher turnover cost ranged from $354.92 in a district with relatively low turnover and recruiting problems to $5,165.76 in a high-turnover district.

A second study conducted in a group of 64 Chicago elementary schools serving large numbers of low-income and minority children estimated even greater costs of turnover (Chicago Association of Community Organizations for Reform Now (ACORN), 2003). Following the teachers in these schools with under 5 years of experience, ACORN charted a turnover rate of 23.3% in the 2001-02 school years. Researchers projected that if turnover rates were to continue at the pace observed in 2001-2002, the 5 year turnover rate for new teachers in these schools would be 73.3%, a figure substantially higher than the 50% turnover identified nationally for teachers in their first 5 years on the job (Ingersoll & Smith, 2003). The Chicago ACORN report

calculated the cost of turnover in three different ways. The first, which came to $10,329.40 per

teacher, was based on researchers' empirical explorations of the schools' costs, which averaged

20% of a leaving teacher's salary. The second method was based on an industry model also used

in the Texas study, which estimated turnover costs at 150% of the leaving teacher's salary, or

$77,470.50 per teacher in this study. The third method calculated a cost of $63,689.00 per

teacher, based on an estimate of 2.5 times the average pre-service teacher preparation costs

statewide. A third analysis, provided by the Alliance for Excellent Education (2004), estimates a

total figure of $2.6 billion annually lost on turnover. Researchers adopted the U.S. Department

of Labor's practice of estimating turnover costs to employers at 30% of the departing employee's

salary. According to this method, cost per teacher for turnover, based on the average US

teacher's salary, is estimated at $12,546 a teacher.

The financial impact of teacher turnover can be a major budget item for some school

districts if methods to decrease turnover are not identified. The study, *Teacher Retention: Why

do Beginning Teachers Remain in the Profession*, examined the reported attitude of beginning

teachers to identify perceived positive aspects of teaching as factors that may lead to teacher

retention. The sample, which was comprised partially of an ongoing study seeking to survey

teachers within various areas within the US was composed of teachers from randomly selected

schools in Georgia. The Professional Attitude survey instrument designed to gather information

regarding 21 characteristics related to teacher career stability was sent to the teachers of

randomly selected schools. Teachers were requested to respond to questions related to

demographics, teacher background, reasons for remaining in the profession, and job satisfaction.

Results showed that teachers can benefit when provided with opportunities to interact and work

with (1) teacher education mentors, (2) colleagues with similar ideas about teaching and working cooperatively, (3) administrators who encourage and promote teachers' ideas, and (4) a community that feels positive about the educational system and those involved. The study further concluded that it is necessary that teacher education programs be proactive and provide support which does not end upon graduation. Support systems within the school environment, provided by teacher education programs and local school administration are essential elements in the retention of beginning teachers (Inman & Marlow, Summer 2004).

Darling-Hammond (2003) in her article *Keeping Good Teachers* indicated that in all schools, regardless of the school wealth, student demographic, or staffing patterns, the most important resource for continuing improvement is the knowledge and skill of the school's best-prepared and most committed teachers. She identified four major factors that strongly influence whether and when teachers leave specific schools or education profession entirely: salaries, working conditions, preparation, and mentoring support in the early years. Darling- Hammond stated that schools can enhance the beneficial effects of strong initial preparation with strong induction and mentoring in the first years of teaching. According to Darling-Hammond a number of studies have found that well-designed mentoring programs raise retention rates for new teachers by improving their attitudes, feelings of efficacy, and instructional skills. Districts such as Rochester, New York and Cincinnati, Columbus, and Toledo Ohio have reduced attrition rates of beginning teachers by more than two-thirds (often from levels exceeding 30% to rates of under 5%) by providing expert mentors with release time to coach beginners in their first year on the job. These young teachers not only stay in the profession at higher rates, but also become competent more quickly than those who must learn on trial and error. Mentoring and induction

programs will only produce these benefits if they are well designed and well supported. The

number of state induction programs increased from seven states in 1996-1997 to 33 in 2002, only

22 states provides funding for these programs, and not all provide on-site mentor (Darling-

Hammond, 2003). In an assessment of one of the oldest programs, California's Beginning

Teacher Support and Assessment Program, an early pilot featuring carefully designed mentoring

systems found rates of beginning teacher retention exceeding ninety percent in the first several

years of teaching (Shields, et al., 2001).

Teacher turnover has had a drastic impact on public education in New York City (NYC).

According to a report by the New York City Council Investigation Division (CID), nearly 30%

of new teachers say it is likely that they will leave the system within 3 years. The national 2 year

attrition rate for teachers is approximately 10%, but in NYC, the rate rises to 25%, with 18% of

teachers leaving in the first year. During the weeks of April 26 and May 3, 2004, New York City

Council Investigation Division (CID) investigators, with the assistance of UFT staff members,

made random blind phone calls to 2,781 teachers currently employed by the NYC Department of

Education. The phone surveys were designed to learn how teachers feel about various aspects of

their work conditions, how many are planning to retire or leave the New York City public school

system, and the likely reasons for their leaving. Results showed that the high rates of retirement

and attrition among New York City public school teachers represent a "brain drain" in the City's

school system. Teachers were divided into three categories based on their experience—new

teachers (defined as having 1-5 years' experience in the classroom), mid-career teachers (6-24

years' experience), and eligible retirees (25+ years' experience). Results from the study showed

nearly 30% of teachers with 5 years' experience or less say it is unlikely that they will still be in the NYC school system in 3 years.

Georgia unlike other states took a different spin on looking at teacher retention. In September 2010, a report from the Governor's Office on Student Achievement examined teacher retention using Georgia public school employment data from school years 1997-98 to 2008-2009. In the report, teachers were counted as retained when they are in the Georgia public education system and they are not retained when they are not in the public education system. Individuals who were new teachers and later transitioned into another professional occupation within the public education system are counted as retained, since they remained in public education, that is, they never left. For the report, individuals who transition into another professional occupation within the public education system were also coded as being retained in public education, as they did not leave. If a teacher became a librarian/media specialist or an assistant principal, for example, they were not viewed as a failure on the part of the public education system.

The Georgia study analyzed the career patterns of all 13,966 individuals who were new public school teachers in Georgia in the 1998-1999, 1999-20, and 2000-2001 school years. The results indicated that the public education system in Georgia retains new teachers at a significantly higher rate than the conventional wisdom that indicates half of all new teachers leave within 5 years. Specifically, 74.7% of all new teachers and 74.8% of new young teachers (under age 26 when they began teaching) were retained in the Georgia public education system after 5 years. After 10 years, 62.8% of the 1998-1999 cohorts of new teachers remained in the public education system in Georgia. The conventional wisdom which says that half of all

teachers leave in the first 5 years is incorrect, according to this recent study in Georgia. Previous research that calculated retention rates of teachers often ignored the reality that many new teachers transitioned into other professions within public education (administration, education support services, etc.) and that many teachers who leave return to teaching after a short time. The results of this report indicate that when calculating retention rates of new teachers, it is important to consider the realities that new teachers move into other professional occupations within public education and that a significant number of new teachers who leave public education return after a short time (State of Georgia, 2010).

Traditional studies on retention have looked at retention of teachers as a whole. Billingsley (2004) states that prior to the concern about the national teacher shortage, special educators were voicing concerns about higher burnout and attrition rate as compared to general education. According to Billingsley (2004), the retention of special education teachers is a critical concern in schools across the nation. In the US annually, the turnover rate for special educators is 20% as compared to the turnover rate of general educator at 13%. Researchers Plash and Piotrowski (2006) stated that by the year 2010, there will be a need for 611,550 special education teachers in the US. Unfortunately, about 13.2% of special education teachers vacate their positions annually, 6.0% leave the teaching profession entirely, while the remaining 7.2% migrate to general education positions (Plash & Piotrowski, 2006). Brownell et al. (2004) concluded that few problems in special education have been as vexing as the chronic under supply of special education teachers.

Careful attention to the working conditions and the induction of early special educators is needed if we are to build a committed and qualified teaching force (Billingsley, Carlson, &

Klein, 2004). Recent reports have documented increasing special education teacher shortage and high attrition rates (McLeakey, Tyler, & Saunders, 2002). Resolving the personnel shortage issue in special education is a difficult task that many administrators are faced with. Keeping effective teachers constitutes a valuable human resource and should be an important agenda item for school leaders (Darling-Hammond, 2003). An investigation entitled *A National Perspective*: *An Analysis of Factors That Influence Special Educators to Remain in the Field of Education*, identified factors that contribute to higher special education teachers' retention. The investigation looked at several factors that the literature identified as influencing teacher retention. These factors are supportive administrators, job satisfaction, commitment, school climate, and mentor programs (Nickson & Kritsonis, 2006).

The Solution: Mentoring

Mentoring has roots that date back to ancient times and "has served as a powerful developer of human potential throughout the centuries" (Bey & Holmes, 1992, p. 19). The term "mentor" had its origin in Homer's Odyssey. Mentor was a wise and learned individual who was the friend of Odysseus, a Greek King. Mentor became entrusted with the education of Odysseus' son, Telemachus, to be his guide and companion (Bey & Holmes, 1990; Posden & Denmark, 2000). There are other historical figures of noted mentors. Socrates and Plato paired as mentor and protégé as were Plato and Aristotle. Today, mentors are thought to be guides and companions along the lines of a protégé or apprentice. The mentor sets the example and guides the protégé to develop into a successful individual in his or her own respect. Mentoring is an important issue in education today and a favored strategy in the US as an element in teacher induction (Vierstraete, 2005). Johnson and Kardos (2005) outlined steps school leaders can take

to bridge the generation gap and build integrated professional culture in which new and experienced teachers collaborate regularly and share responsibility for the success of their students as well as strategies to integrate the work of new and experienced teachers. One such strategy includes assigning new teachers to work alongside experienced teachers. This allows new teachers the opportunity to tap the veteran's knowledge and the veterans can get energized by the new teachers' enthusiasm. Another strategy includes scheduled times for new and veteran teachers to meet. This, along with one-to-one mentoring by experienced teachers, supports new teachers in their work. Smith and Ingersoll (2004) showed that teachers are less likely to quit when they receive mentoring services during their first year of teaching.

Guarino, Santibanez, and Daley's work on teacher recruitment and retention was a review of the recent empirical literature that discussed in-service policies and found that a number of working conditions were related to success in recruitment and retention. Mentoring and induction programs were among those factors that often appeared to play a prominent role in teacher's decision to quit or remain on the job. They also cited work from Smith and Ingersoll, (2004) that used data from the 1990-2000 School and Staffing Survey and its Teacher Follow-up Survey that found in a sample of 3,000 beginning teachers, those who experienced induction and mentoring support in their first year of teaching, were less likely to leave teaching or change schools (Gurino, Santibanez, & Daley, 2006).

According to Heider (2005) teacher attrition has become a serious problem in the US in recent years. Studies have shown that many talented, new teachers are leaving the profession early in their careers due to feelings of isolation. In response to the alarming turnover rate, school districts have adopted mentoring programs that have been successful at making beginning

teachers feel less isolated. Formal mentoring has become a very popular teacher induction tool in recent years. In 2001, 38 states were offering some kind of mentoring or induction program for new teachers (Hirsch, Koppich, & Knapp, 2001). The Vermont Department of Education requires each of its schools to provide mentoring support for new teachers throughout their first 2 years of employment. Participation in a mentoring program is also required for eligibility for a Level II teaching license (Vermont Project for Accomplished Teaching, 2003). Other states, such as Georgia, Louisiana, Montana, Texas, Wisconsin, California, Ohio, Washington, and New York have also been experimenting with induction programs that include some form of mentoring with promising results. The Pathways to Teaching Careers program at Armstrong Atlantic State in Savannah, Georgia report a retention rate of 100% over 5 years as well as the Teacher Induction Program at Texas A & M University. The New Teacher Project in Santa Cruz, California reported a 95% retention rate over 12 years. By 2013, 3.5 million new teachers will need to be hired to support increased enrollment in public schools and to replace retiring teachers (Hull, 2004).

In 2005, Heider examined four different types of mentoring practices and their potential for decreasing or eliminating teacher isolation. The four practices examined were, telementoring, mentoring by a veteran teacher, novice teacher learning communities, and peer coaching. Telementoring involves electronically connecting a group of new teachers by using a list server. The list server allows beginning teachers with an opportunity to voice their concerns, share valuable teaching resources, get advice about dealing with difficult students, and share strategies for time management and share lesson plans (G. Eisenman, 1999). Mentoring by a veteran teacher involves numerous face-to-face interactions between beginning teachers and their

mentors. Mentoring by a veteran teacher is the most traditional type of mentoring program.

Novice teacher learning communities allow groups of beginning teachers to come together for

support and guidance. Peer coaching provides beginning teachers with the opportunity to get

together several times a school year to share ideas, discuss problems, or confide in each other. In

peer coaching, two or three teachers with varying levels of experience observe each other's

lessons, share strategies, discuss solutions to problems, or conduct research in the classroom on a

weekly or daily basis (Robbins, 1991).

        The four mentoring program examined by Heider (2005) identifies strengths and

weaknesses of each program. The strengths identified of telementoring are that new teacher can

get help or feedback at a time that accommodates their busy schedules. A weakness is the lack

of face-face contact with mentors. In contrast to telementoring, the strength of mentoring by a

veteran teacher is the face -to-face interaction between mentor and new teacher. A weakness

with veteran teacher mentoring is that mentors are often untrained or have different teaching

assignment or philosophy. A strength of novice teacher learning communities is all participants

are new teachers who are empathetic to each other's' problems and concerns. A weakness with

these communities is that it is difficult to build trust when participants are only able to meet

when busy schedules permit. Peer coaching promotes reflective practices in a non-threatening

environment. The weakness is that it has never really caught on in the US because teachers have

very little free time to observe colleagues. Studies have shown that mentoring programs such as

telementoring, mentoring by a veteran teacher, novice teacher learning communities, and peer

coaching keep new teachers motivated and enthusiastic while increasing their self-efficacy. As a

result, schools that employ these practices experience fewer turnovers (Darling-Hammond,

2003).

 In the late 1990s, Eberhard, Reinhardt-Mondragon and Stottlemeyer (2000) conducted a study of beginning teacher attrition in South Texas that collected data on the effects of mentoring on beginning teachers. They sent out a survey questionnaire to all new teachers (defined as those with 3 years of teaching experience of less) in South Texas. The questionnaire included items on four aspects of mentoring: (1) Whether the respondent was provided a model teacher (a veteran teacher observed by the new teacher); (2) whether the respondent was provided a mentor teacher; (3) If so, the number of hours spent per week with the mentor (less than 1 hour, 1-3 hours, more than 3 hours); (4) the new teacher's rating of their satisfaction with the mentor program, if they were a participant. Participation in the survey was voluntary, not all beginning teachers were included, and the sample size was 228. The study looked at whether first-year teachers intended to remain in teaching there subsequent year- no data on actual retention or turnover were collected. The study did find some positive effects of mentoring programs, but these diminished with teacher experience. That is, mentoring had more impact on new first year teachers than those who had already has a year or two of experience. Those who reported spending more than one hour per week with their mentor were more likely to say they planned to continue (90%) than were those who had less than one hour per week of contact time (76%). Those satisfied with mentor program were also more likely to say they planned to continue in teaching (86 %) than those who said they were dissatisfied with the program (79%).

 In a follow-up analysis, Ingersoll and Smith (2003) used School and Staff Survey (SASS) data to focus on the effects of participation in various mentorship and induction activities on the turnover of first year teachers. The 1999-2000 SASS included new expanded battery of items in

the teacher survey questionnaire on the content and character of teacher induction and mentoring

programs in schools. Ingersoll and Smith used this data, linked with preliminary data from the

2000-2001 Teacher Follow-up Survey, to undertake an analysis of the impact of participation in

various mentorship and induction activities on the likelihood that beginning teachers left

teaching at the end of their first year, moved to a different school, or stayed in the same school to

teach a second year. The 1999-2000 samples were comprised of 5,200 elementary and

secondary teachers. Ingersoll and Smith focused solely on beginning teachers, those without

prior experience and in their first year of teaching in 1999-2000, a national sample of 3,235. The

analysis examined the impact of three sets of induction-related measures drawn from survey

questionnaire items. The first set of measures concerned participation in mentorship activities.

The second set of measures focused on participation in collective induction activities and the

third set of measured focused provisions for extra resources. The results of the analysis showed

that having a mentor in the same field reduced the risk of leaving at the end of the first year by

about 30%, a result that was statistically significant at a 93% level of confidence.

The State Board for Educator Certification (Fuller, 2003) along with the Charles A. Dana

Center (2002) at the University of Texas at Austin, conducted evaluations of the Texas

Beginning Educator Support System (TxBESS) in 2002 and 2003. TxBESS, which began in

1999, was a statewide comprehensive program of instructional support, mentoring and formative

assessment to assist teachers during their first year of service in Texas public schools. Teacher

mentors, along with other support-team members such as school and district administrators,

education service center staff members and faculty members from teacher preparation programs,

offered guidance and assistance to beginning teachers during their first year on the job. One key

program objective was to improve beginning teacher retention in Texas. About 15% of new

teachers in the state were involved in the program. The study obtained information from

participants through an annual mailed survey questionnaire. Data on teacher retention was

obtained a state personnel database. Retention included those who remained in Texas public

schools for the following year, including those who moved from one Texas public school to

another. Turnover included those no longer employed in a Texas public school the following

year, including those who left Texas, but took a teaching job in a public school in a neighboring

state. The study compared annual retention rates of the TxBESS participants with those of all

beginning teachers in the state from the 1999-2000 through the 2002-03 school year.

Results showed program participation had positive effects on beginning teachers'

retention. Fuller (2003) found that TxBESS participants left teaching at lower rates than

beginning teachers who had not participated in TxBESS for each of their first 3 years on the job.

After 1 year, 89.1% of beginning teachers who went through the TxBESS program returned for a

second year of teaching, while 81.2% of nonparticipant new teachers did so, a difference that

was statistically significant. After their second year, 82.7% of participants remained, while only

74.3% of non-participants did so, a statistically significant difference. After their third year,

75.7% of participants remained, while 67.6% of others did so, a statistically significant

difference.

In April 1997, the Council for Exceptional Children's (CEC), Professional Standards and

Practice Subcommittee adopted guidelines for developing a mentoring program (Council for

Exceptional Children, 1997). The guidelines stated:

Each new professional in special education should receive a minimum of a 1-year

mentorship during the first of his or her professional special education practice in a new

role. The mentor should be an experienced professional in the same or similar role that

can provide expertise and support on a continuing basis. (p. 8)

The guidelines delineate the purposes of a mentorship program and the features of a successful

mentorship. This work has been expanded by the Mentoring Induction Project (MIP (White &

Mason, 2001), which was formed to develop guidelines and support for beginning special

education teacher mentoring throughout the country. The goals of the Mentoring Induction

Project (MIP) are to develop a model of support for special education teachers, improve existing

teaching conditions, strengthen the induction experiences of new teachers, and establish and pilot

national mentoring guidelines for first year special education teachers.

The MIP principles and guidelines have been piloted in urban and suburban schools

throughout the country. Districts were selected based on a high need for mentoring, the ability to

support the MIP, and administrative support. The Oregon Recruitment/Retention Project (Boyer

& Gillespie, 2002) addressed new teachers through the following activities: consultation to

special education administrators, list server and web-based guidance for recruitment and

retention strategies, direct assistance in capacity building and retention strategies, case study

evaluation of a district's support programs, and a self-assessment tool for identifying challenges

in recruiting and retaining special education teachers.

Programs targeting induction for special education teachers have also been developed at

the district level. Whitaker (2000) described a district-level program that was grounded in the

findings of focus group research. The program involved support from mentor teachers and the

district administrators which included scheduled and unscheduled meetings with mentors and

monthly contacts with administrators. New teachers attended a day-long orientation meeting

tailored to identify needs of special education teachers, learning system information related to

special education. The special education teachers participated in a graduate induction course for

all new teachers in the district and also met at least two more times to discuss issues relative to

special education. As in the Oregon Recruitment/Retention Project (2002), the mentors received

a schedule of assistance, emphasizing suggested types of assistance to be given throughout the

year.

     In a qualitative study of nine first year special education teachers, Boyer (1999) found

that eight of the nine teachers attributed their decision to remain in special education to their

mentor. Boyer concluded that the mentorship program contributed to teachers' confidence in

themselves and their teaching. Boyer argued that building confidence and competence in

teachers helped to develop teacher's long-term commitment to teaching. In Kueker and

Haensly's (1991) study, eight first year teachers in a generic special education teacher training

program increased in self-confidence, which they directly attributed to the mentor in their first

year. On a survey at the end of the induction year, teachers gave their highest rating to the

statement, "the value of having a mentor in the first year" (p. 10).

     Most studies identified time and frequency of contact with a mentor as an important

factor influencing teachers' satisfaction in mentorship and success in the first year of teaching.

This most prominent in Whitaker's (2000) study where there was a significant correlation

between the frequency of contact and perceived effectiveness of the mentorship. She writes,

"While frequency alone did not determine the perceived effectiveness of the mentoring, to

perceived as most effective, the mentor must have has contact with the first-year teacher on at

least a weekly basis" (p. 552). Significant correlation also was found between overall perceived mentoring effectiveness and retention.

Studies that examined the characteristics of mentors for special education teachers, suggested that mentors should be special educators and have similar jobs as the first-year teacher. White (1996) analyzed the effect of the Kentucky Teacher Internship Program on the attrition rate of special education teachers in the state. When the mentor was a special educator, the beginning teacher reported a more successful first year and rated the mentor's influence on their decision to remain in special education as highly significant (Griffin, Winn, & Kilgore, 2003). Gehrkel and McCoy (2007), research with five first year elementary LD resource special education teachers indicated that having a strong network of support and a variety of resources positively influenced these teachers' ability to focus on student learning and on their intent to remain in their positions. Indications were that the teachers in this study experienced benefits from an induction program tailored to the needs of special education teachers. Just as in previous research, the beginning special educators in this study valued having an assigned mentor who was familiar with the field of special education. From this district mentor, they received emotional, procedural, curricular, and instructional information related to their needs as LD resource teachers. They concluded that a school environment, or 'village,' that supports the resilience and determination of beginning special education teachers improves the likelihood of them remaining in the profession (Gehrkel & McCoy, 2007).

The Solution: Job Satisfaction

The education mission seems to be dependent on the way teachers feel about their work and how satisfied they are with it. Most research on teacher job satisfaction is rooted in the

pioneering work of Herberg, Mausner, and Synderman (1959) who identified the satisfying and dissatisfying factors. Improving teachers' job satisfaction is paramount in an era when drop-out of the profession in the first 5 years. According to Ingersoll (2003), retirement accounts for a relatively small portion of departures from teaching (about 1/8). Job dissatisfaction and the desire to pursue a better job inside or outside the education field accounted for a much bigger share (almost half of the leavers). Many leavers are dissatisfied with their jobs because of low salaries, student discipline, lack of support, and little opportunity to participate in decision making.

Wood and Weasmer (2004) in their article on *Maintaining Job Satisfaction: Engaging Professionals as Active Participants* argued if factors that constitute job satisfaction can be identified, then steps can be taken to provide support for new and veteran teachers to ensure the personal gratification that may reduce attrition rates. They identified mentoring as an important factor among those factors that impact job satisfaction. According to Wood and Weasmer, new teachers need a supportive community in which mentoring is not just an opportunity to give advice, but a "two way exchange of listening and questioning" that should begin before the beginning teacher's first entrance into the school (Boreen & Niday, 2000, p. 152). When veteran teachers and novices share their ideas/practices; the benefits are reciprocal. The beginning teacher gains a clearer awareness of the school culture and a stronger sense of what is expected in planning, evaluating, and managing the learning environment. The reciprocity provides a learning stimulant for both teachers and thereby increases job satisfaction.

The link between job satisfaction and the propensity to leave is well established (Gersten, Keating, Yavonoff, & Harniss, 2001; Singh & Bilingsley, 1996). The one large scale study

reporting information on this topic (Billingsley & Cross, 1992) compared randomly selected special educators and general educators. Job satisfaction was measured by asking the teachers to rate on 4-point jobs. Billingsley and Cross found greater role ambiguity and less job involvement among special educators but no overall difference in job satisfaction between the two broad groups of teachers. Stempien and Loeb (2002) conducted a study that compared general and special education teachers. Teacher participation was requested from eight suburban schools within a 30 mile radius of Detroit, Michigan. Six of the schools were predominantly general education schools, and the other two schools exclusively offered special education programs. The main body of the questionnaire consisted of two satisfaction scales, job and life. The Brayfield-Rothe Job Satisfaction Index, which consisted of 18 statements to measure teacher job satisfaction. A significant difference in job satisfaction was found. Teachers of students in general education reported higher satisfaction than teachers of students with disabilities.

Biscay (2009) measured job satisfaction and motivation by surveying a sample of 50 teachers. The study made use of two types of surveys, a conventional survey and the Experience Sampling Method (ESM). A sample of 12 teachers was studied using the Experience Sampling Method (ESM). The ESM makes use of an electronic device to page the subject several times a day. When beeped, the subject completes a short survey about what they are doing, which they are with, and how they are feeling. ESM thus provides a more richly detailed picture of the day-to-day lives and emotions of participants than conventional surveys. ESM has been used to study how people feel doing different activities and to determine which daily activities are most psychologically rewarding (Kubey & Csikszentmihalyi, 1981). Teachers were randomly beeped by special pagers five times a day for 5 days and completed surveys on mood and activity for

each beep, resulting in 190 reports of teachers' daily experiences. Conventional survey data

corresponded with ESM data. The conventional survey consisted of 45 questions. The survey

was divided into three sections. The first section included six demographic questions that

established subject taught, gender, age, advisorship for a club, length of service, and

compensatory time jobs. The second section included thirty-four statements which determined

levels of job satisfaction, satisfaction with income, attitude toward paperwork, pride in job, and

views on various teaching- related subjects. Likert scales were used as responses with one

indicating strong agreement, two indicating agreement, three neutrality, four disagreement, and

five strong disagreement. The last section of the survey was designed to determine how the

respondents felt during various activities. These five questions asked the respondent to select

from a group of 14 words, the three words that best described their mood in the following

situations: socializing with faculty members, classroom discussions which seem successful,

faculty meetings, classroom discussions that seem unsuccessful, and paperwork. The section

was adapted from the moods section in the ESM booklet and was first designed for a study of

hobby participants (Nash, 1993). The list of moods contains the same words found in the ESM

moods section along with other words. Job satisfaction and motivation correlated significantly

with responsibility levels, gender, subject, age, years of teaching experience, and activity. For

this group of teachers who work in a school with a selective student body, overall motivation and

job satisfaction levels were high. Based upon the findings, it appears that gratification of higher-

order needs is most important for job satisfaction.

Using data from the National Center for Education Statistics' 1990-1991 Schools and

Staffing Survey (SASS and its supplement, the 1991-1992 Teacher Follow-up (TFS), Ingersoll

(1997, 2000, 2001) conducted a series of statistical analyses of the prevalence of school

mentoring programs, the extent of effective assistance provided to new teachers and the effects

on job satisfaction and teacher turnover. The 1990-1991 was a nationally representative survey

of 11,582 principals and 53,347 teachers from both public and private schools. Twelve months

after the administration of the SASS questionnaire, the same schools were again contacted and

that entire original teacher sample that had moved from or left their teaching jobs was given a

second questionnaire to obtain information on their departures. This latter group, along with a

representative sample of those who stayed in their teaching jobs, constituted the 1991-1992 TFS.

The sample contained 6,733 elementary and secondary teachers. The SASS school questionnaire

asked principals whether their schools had a formal program to help beginning teachers such as a

master or mentor teacher program. The SASS questionnaire asked respondents about their

degree of agreement with the statement "this school is effective in assisting new teachers" for

four related items: student discipline, instructional methods, curriculum, and adjusting to the

school environment. Analysis of these data indicated that formal programs to help new teachers

were common in schools, but that effective assistance, as reported by teachers, was not.

Ingersoll (1997) examined the effects of both of these school level measures: having a mentor

and effective assistance, on teacher job satisfaction, while controlling for a number of

background characteristics of both teachers and schools. The measure of teacher job satisfaction

was based on a survey question that asked all teachers: "If you go back to your college days and

start over again, would you become a teacher or not?" The answer scale ranged from 1 (certainly

would not become a teacher) to 5 (certainly would become a teacher). Results showed the

existence of a mentor program in schools had a small inverse relationship to overall teacher job

satisfaction. Teachers, including both beginners and veterans, in schools with mentoring

programs reported slightly less satisfaction overall. On the other hand, the analysis showed

effective assistance had a strong positive effect on job satisfaction. Teachers reported more job

satisfaction in schools where the faculty on average reported more effective assistance for new

teachers.

Singh and Billingsley (2004) examined the effect of work related variables on two groups

of special education teachers in Virginia about their intent to stay in teaching.   The sample

included 658 special education teachers. The purpose of the study was to examine certain work-

related variables and how they influenced job satisfaction, commitment to teaching, and the

intent to continue in the profession. Results indicated that for both group of teachers, job

satisfaction had the strongest direct positive effect on intent to stay.

Summary

The literature is rich regarding the factors that positively impact the retention of teachers.

A major research focus over the past decade has been centered on the massive exit of teachers

with less than 5 years of experience. The retention rate according to the literature has been as

great as 25% in some states (Texas Center for Research, 2000; New York CID, 2004). Teaching

has become a revolving door that closes behind an unusually large number of those in the early

years of teaching.   Various reasons have been posted about high rates of attrition among

beginning teachers, including personal reasons, other opportunities, and dissatisfaction with

teaching. It is suggested that beginners leave because of the frustration and initial difficulties

that they experience.

The retention of special education teachers has been a concern for years. According to

Billingsley, a noted researcher in the field of special education, the retention of special education teachers is a critical concern in schools across the nation. Billingsley (2004) stated that prior to the concern about the national teacher shortage, special educators were voicing concerns about higher burnout and attrition rate as compared to those teachers in general education some of the factors that impact special education teacher retention. According Whitaker (2001) five factors related to the difficulties novice special education teachers face their first year of teaching include: (1) An inability to transfer learning from theory into practice; (2) a lack of preparation for many of the difficulties and demands of teaching; (3) reluctance to ask questions or seek help; (4) the difficulty of the teaching assignment and the inadequate resources provided; and (5) unrealistic expectations and the associated loss of efficacy. Results from research on special education teacher mentoring indicates that strong teacher mentoring programs supported by other teacher induction processes result in significantly higher retention rates for special education teachers than induction programs without mentoring (White & Mason, 2001; Whitaker, 2000).

When we look at solution to the problem of retention through the lens the sociocultural theory, mentoring and job satisfaction can play a major role in a teacher's intent. The solution is in the design and components that integrate social and cultural connections within the community of learners. According to Musanti (2004), mentoring reveals benefits for teacher education practices and provides insight into "innovations based on close collegial partnership with peers, providing a genuine space for inter-subjectivity, collaborative thinking and knowledge co-construction" (p. 15). This socially constructed view of mentoring suggests that "learning should be participatory, proactive, communal and collaborative" (Cornu, 2005, p. 357). Finally, Woods and Weasmer (2004), suggest that mentoring strategies increase job satisfaction,

which aids in the overall retention of teachers.

CHAPTER 3

METHODOLOGY

The causes of teacher shortage appear fairly complex; however, the failure to retain special education teachers is a significant contributor to this shortage (Billingsley, 2004). The shortage of special education teachers is a national concern that affects all regions of the US; 98% of school districts nationwide have shortages (Bergert & Burnette 2001; Boyer & Gillespie 2000). Job satisfaction has been linked to the retention of special education teachers as well as general education teachers. Special educators encounter a number of factors that impact job satisfaction. Mentoring has also been linked to the retention of special education teachers. Results from research on special education teacher mentoring shows a correlation between mentoring programs and the retention rates for special education teachers.

This mixed methods study was an examination of existing data from the 2007 Georgia Teacher Survey (Department of Research and Evaluation at the Georgia Professional Standards Commission (Appendix B) to establish a link between mentoring, job satisfaction, and the retention of special education teachers. The central focus of a mixed methods approach is one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g., consequence-oriented, problem-centered, and pluralistic). For example, Whitaker (2001), White and Mason (200), Griffin, Winn, and Kilgore (2003), Nickson and Kritsonis (2006), and Gehrkel and McCoy (2007) indicated that mentoring can have a direct influence on special educator's commitment to the profession and an indirect impact on teacher job satisfaction and intent to stay. This study is important for two reasons: one, it will provide school districts with relevant information regarding mentoring programs and their effectiveness, second, it will provide

quanitative data from special education teachers on how mentoring and job satisfaction has impacted their plans to remain in special education. This chapter is a description of the methods used by the Georgia Professional Standards Commission to collect the data reported in this study. Other key components of this chapter are the research questions, research design, population, participants, sample, instrumentation, data collection, and data analysis.

Research Questions

The research questions were designed to generate data with which to answer the overarching research question regarding the relationship between mentoring, job satisfaction, and the retention of special education teachers. The specific questions were:

RQ1: Does job satisfaction impact a special educator's intent to leave or stay in the profession?

RQ2: Does the presence of a mentoring program affect the intent to leave or stay of special education teachers?

RQ3: Is there a relationship between mentoring, job satisfaction, and the intent to leave or stay for special educators?

Research Design

This mixed methods study will use survey research to explore existing data from a web-based state-wide questionnaire. A mixed methods approach is one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g., consequence-oriented, problem-centered, and pluralistic). Such a design employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand the research problem. The data collection also involves gathering both numeric information (e.g., on instruments) as well as text information

(e.g., interviews) so the final database represents both quantitative and qualitative information. Quantitative researchers employ strategies of inquiry such as experiments and surveys and collect data with predetermined instruments that yield statistics data. Qualitative researchers use strategies of inquiry such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies. According to Creswell (2012) the researcher collects open-ended, emerging data with the primary intent of developing themes from the data. The existing data from the 2007 Georgia Teacher Survey developed by the Department of Research and Evaluation at the Georgia Professional Standards Commission was used to establish a relationship between mentoring, job satisfaction and the retention of special education teachers.

Instrumentation

Selected portions of the existing data from the 2007 survey of Georgia's public school teachers, created by the Georgia Professional Standards Commission (PSC), the state's public educator licensing agency, was used to establish a relationship between mentoring, job satisfaction, and the retention of special education teachers. The purpose of the survey was to study why teachers continue or leave teaching. The information from the original study was important because it assisted with the facilitation of policy and practice at state and local levels to improve teacher retention. Of the state's 115,049 teachers in 2007, 19,312 completed the on-line survey and provided sufficient identification information to enable the agency to follow those who remained in state public education. Because more than 19,000 teachers provided their identification information, the state was able to study their answers in the context of all the information available from the PSC certification database as well as the biannual Certified

Personnel Information collection conducted by the Georgia Department of Education and maintained at the Georgia Professional Standards Commission (GPSC).

An initial section of the survey was constructed containing open-ended and multiple-response items to gather information on preparation history and degrees awarded. A second section concerning experience with mentoring both as a mentee and as a mentor was constructed. Multiple response items were then constructed for each of the seven remaining areas. The GPSC was able to follow the careers of these teachers to better understand what they actually do in comparison to what they said. Under no circumstances were the individual teachers identified (Eads, 2010). For the purpose of this study, items II, III, IV, and V of the survey were used. Item II was an open ended question that asked respondents what they liked most and least about teaching and what they would change. Item III dealt specifically with mentoring; item IV asked questions regarding reason for teaching; item V asked respondents about intent.

Pilot Study

The Georgia Professional Standards Commission (GPSC) conducted a pilot study in December, 2004. The GPSC developed and administer an internet based survey of Georgia public school teachers to study reasons for teacher attrition. A review of previously conducted research by the PSC on reasons for teacher attrition identified initial preparation, mentoring, personal and professional issues, resources, and leadership, professional development, and community issues as bearing on teachers' decisions to stay or leave a school or to change careers. An initial survey draft was provided to 23 practicing teachers and 11 school administrators for review and critique; modifications based on that critique were incorporated. For a second review, three school district human resources directors were requested to ask their

teachers to take the survey. This second sample of teachers was asked to complete the web-based survey and was also asked to critique the survey via email to the developers. The data from the respondents were reviewed for final revision of the operational survey.

Data Collection

The GPSC sent letters to the superintendents of all 180 Georgia school districts inviting them to have their school districts participate in the survey. That letter promised that participating districts would receive summaries of the responses from their teachers with no identification of individual teachers, and that they would receive comparable summary results at the Regional Educational Service Agency (RESA) level (16sixteen RESAS provides a range of services to groups of school districts). They were informed that the survey would be scheduled during the Spring semester beginning in January and ending in early March. Letters were also sent to the human resource directors of the school districts informing them that their superintendents had been asked for district participation and provided them with extensive information for successful participation should the superintendent's approval be forthcoming. Upon superintendents' approval, human resource directors were provided with model communications to building principals asking them to communicate to their teachers asking for their participation (Eads, 2010).

Upon receiving approval of participation from superintendents, human resources directors were contacted advising them of the preferred scheduling of their school district's participation. Each participating district was scheduled into one of six beginning week blocks, starting with January 29, 2007, and extending through March 5, 2007. Both paper and electronic packages included model letters for the districts to use in communicating with their school

principals, and for the principals to use in communicating with their teachers. A commercial web-based survey software package was employed to provide access to the survey and record responses (Eads, 2010). The present study used only the survey responses from approximately 2,000 special education teachers who responded to specific questions regarding mentoring and job satisfaction. The archived data was provided to the researcher in a SPSS (Statistical Package of Social Sciences) file.

Validity

The survey for the present study was a secondary/existing instrument that underwent extensive trials to determine validity during the pilot study conducted by Georgia Professional Standards Commission. In a separate analysis, a factor analysis (SPSS, Varimax rotation) was applied to the data to determine the viability of subscales within the many items in the survey. Six items from the larger set of administration items loaded on what appeared to be a "building administration" scale. Those items were averaged (ignoring missing responses) for a scale average. Schools with at least ten respondents answering these six items were identified for comparison. For the purpose of the present study, the most appropriate determination of validity would be external validity. External validity is the extent to which the results of the study can reflect similar outcomes elsewhere, and can be generalized to other populations or situations.

Participants

Based on the data from the GPSC Teacher Retention Survey, respondents appear to relatively well represent the demographics of the total Georgia public school teacher population demographic in terms of gender, ethnicity, and subjects taught. Women were slightly more likely to respond to the survey than their actual representation. They comprised 84% of the

survey respondents, while they represented 81% of the total teacher population. African-American teachers were somewhat under-represented. African Americans comprised about 14% of the survey sample, but represented 22% of the total teacher population. Special education teachers represented about 14% of the total teacher population. Fifteen percent of the sample was special education teachers (Eads, 2010). The subject representation between the survey and the total teacher population was very close, as shown in Figure 1.
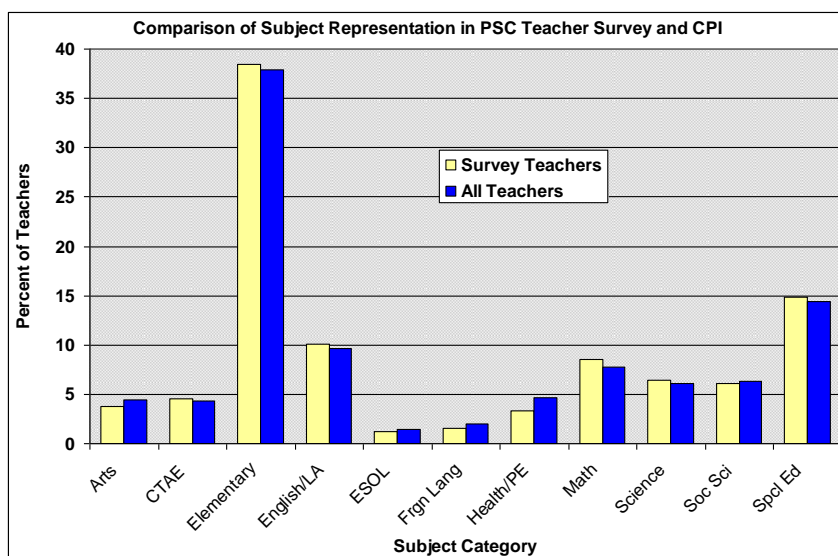
Figure 1. Comparison of subject representation in PSC teacher survey and CPI.

For the purpose of the present study, the participants were special education teachers who possessed Georgia educational certification, responded to items II, III, IV, and V of the Georgia Professional Standards Certified Teachers survey. The ranking and response to these items was the bases for determining the participants. These participants were chosen based on the confines on the study and the existing data sets available as a result of the Georgia Teacher Survey.

Sample

Purposive sampling was appropriate for this study since the research question targeted a specific subset of the overall surveyed population. A purposive sample is a non-representative subset of some larger population, and is constructed to serve a very specific need or purpose. A researcher may have a specific group in mind, and attempt to isolate the targeted group from a larger sample. The original 19,312 GPSC survey respondents appeared to represent the demographics of the total Georgia public school teacher population demographic in terms of gender, ethnicity, and subject taught. Women comprised 84% of the sample and African Americans 14% of the total survey respondents. Special education teachers represented about 15% of the respondents for a sample of approximately 2,000. Therefore, the purposive sample for this study consisted of approximately 2,000 participants representing the total demographics of Georgia public schools.

Data Analysis

This study utilized mixed methods with triangulation to explore existing data from the 2007 Georgia Professional Standards Commission teacher survey. A mixed methods approach is one in which the researcher tends to base knowledge claims on pragmatic grounds, (e.g., consequence-oriented, problem-centered, and pluralistic). It employs strategies of inquiry that involves collecting data either simultaneously or sequentially to best understand research problem. The data collection also involves gathering both numeric information (e.g., on instruments) as well as text information (e.g., interviews) so that the final database represents both quantitative and qualitative information. Quantitative researchers employ strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data. Qualitative researchers use strategies of inquiry such as narratives,

phenomenologies, ethnographies, grounded theory studies, or case studies. Creswell (2012) noted researchers collects open-ended, emerging data with the primary intent of developing themes from the data.

The triangulation design is the most common and well known approach to mixed methods analysis (Creswell, Plano, & Clark, 2003). The purpose of this design is "to obtain different but complementary data on the same topic" (Morse, 1991, p. 122) to best understand the research problem. The intent in using this design is to bring together the differing strengths and non-overlapping weaknesses of quantitative methods (large sample size, trends, generalization) with those of qualitative methods (small, details, in depth) (Patton, 1990). This design is used to directly compare and contrast quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data. The triangulation design procedure is a one-phase design in which the quantitative and qualitative methods during the same timeframe and with equal weight. The single-phase timing of this design is the reason it is referred to as "concurrent triangulation design" (Creswell, Plano, & Clark, 2003). It involves the concurrent, but separate, collection and analysis of quantitative and qualitative data so that the researcher may best understand the research problem. The results separate results are pulled together in the interpretation to facilitate integration of the two types during the analysis.

The Statistical Analysis System (Allison, 2001) was used to examine the relationship between mentoring and retention as well as job satisfaction and retention. The quantitative data were analyzed using multiple logistic regressions. Multiple logistic regression is used when the dependent variable is nominal and there is more than one independent variable; it is analogous to multiple linear regression. The independent variables, job satisfaction and mentoring, were

tested against the dependent variable, retention. The statistical null hypothesis states that there is

no association between special education teacher retention and mentoring and there is no

association between special education teacher retention and job satisfaction. These were tested

at the alpha level of significance set at 0.05. A p-value was used to calculate the probability of a

false-positive event of significance.

After the completion of descriptive analyses, logistic regression analysis was used to

evaluate the relationship between retention and the independent variables, mentoring and job

satisfaction. In logistic regression, the response variable of interest is binary, i.e. it has two

possible responses. The response variable typically denotes yes or no, success or failure, live or

die, or any other two choices. In our research, the response variable is retention, yes or no.

Logistic regression is based on odds. The odds of an event occurring is the ratio of the

two possible outcomes, the event occurring or not occurring. If $\hat{p}$ is the proportion of teachers

who left the teaching profession, then $1 - \hat{p}$ is the proportion of teachers who remained in the

teaching profession. The odds are therefore defined as follows (Hosmer & Lemeshow, 2000):

$$Odds = \frac{\hat{p}}{1-\hat{p}} \; .$$

An odds ratio is a ratio of two sets of odds, the odds for one event divided by the odds for

another event. Let $\hat{p}_1$ and $\hat{p}_2$ denote the proportions for two events. Then the odds ratio would

be:

$$Odds\ ratio = \frac{\frac{\hat{p}_1}{1-\hat{p}_1}}{\frac{\hat{p}_2}{1-\hat{p}_2}}.$$

In a logistic regression model, we are interested in modeling the mean of the response

variable p in terms of our independent variables of interest (Hosmer & Lemeshow, 2000). Our

independent variables are represented by x_i, where i specifies which variable of interest since

multiple independent variables may be included in a logistic regression model. A logistic

regression model is written in terms of the log odds for an event. The log odds is a linear

function of the explanatory variables. The statistical model for logistic regression is:

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \cdots + \beta_q x_q,$$

where p is a proportion, β_r represent the coefficients for the model, $r = 0, 1, \ldots, q$, x_i represent

the independent variables of interest, and $i = 1, \ldots, q$, denoting the independent variables

included in the model.

As an example of the statistical model for logistic regression, we present the model using

our dependent variable of interest, retention, and one of our independent variables of interest,

mentoring. Mentoring may have two values, yes if they received mentoring, and no, if they did

not receive mentoring. For those who received mentoring, the equation would be:

$$log\left(\frac{p_{mentoring}}{1-p_{mentoring}}\right) = \beta_0 + \beta_1,$$

where $p_{mentoring}$ is the proportion of teachers who left the teaching profession who received

mentoring. For those who did not receive mentoring, the equation would be:

$$log\left(\frac{p_{no\ mentoring}}{1 - p_{no\ mentoring}}\right) = \beta_0,$$

where $p_{no\ mentoring}$ is the proportion of teachers who left the teaching profession who did not

receive mentoring. In the equation for those who received mentoring, the independent

variable, x_1, is equal to 1, while in the equation for those who did not receive mentoring, the

independent variable, x_1, is equal to 0. This explains the absence of the β_1 coefficient in the second equation.

To ease interpretation, instead of using log odds, models are typically explained in terms of odds. That requires transformation of the log odds equation using the exponential function, e. For each equation, we transform it by exponentiating both sides of the equation. Since the exponential function and the log function are inverses of each other, we have the following:

$$\left(\frac{p_{mentoring}}{1-p_{mentoring}}\right) = e^{\beta_0 + \beta_1},$$

and

$$\left(\frac{p_{no\ mentoring}}{1-p_{no\ mentoring}}\right) = e^{\beta_0}.$$

Here, using algebra and starting with our transformed equation for mentoring, we have the following:

$$\left(\frac{p_{mentoring}}{1-p_{mentoring}}\right) = e^{\beta_0 + \beta_1} = e^{\beta_0}e^{\beta_1} = \left(\frac{p_{no\ mentoring}}{1-p_{no\ mentoring}}\right)e^{\beta_1}.$$

With one additional step of manipulation, we have our odds ratio for mentoring:

$$\frac{\left(\frac{p_{mentoring}}{1-p_{mentoring}}\right)}{\left(\frac{p_{no\ mentoring}}{1-p_{no\ mentoring}}\right)} = e^{\beta_1},$$

where the value for the odds ratio is based on the estimated value for β_1.

Several logistic regression models were developed. First, a logistic regression model was developed considering retention as the outcome and mentoring as the independent variable. Next, this model was adjusted by including demographic variables of interest as independent covariates along with mentoring. Similarly, models were developed for each job satisfaction

variable. In addition, a model was also developed that included both job satisfaction variables.
The last logistic regression model to be developed was the full model where the outcome was
retention and all of the independent variables, mentoring and the two job satisfaction variables
were included. Like all of the previous models, an adjusted model was created that included the
demographic variables along with the independent variables.

   The exiting data from the 2007 Georgia Professional Standards Commission teacher
survey used the validating quantitative data model to validate and expand the quantitative finding
from the survey by including open-ended qualitative questions. In this model, the researcher
collects both types of data within one survey instrument. The qualitative data used thematic
analysis to explore the association between special education teacher retention, mentoring and
job satisfaction by identifying underlying themes and describe the themes with illustrative quotes
(Braun & Clarke, 2006).

Procedure

   The researcher utilized existing data already collected from the Georgia Professional
Standards Teacher Survey. To acquire knowledge and access, the researcher meet with Dr. Jerry
Eads (Georgia Professional Standards Commission) and had a phone conference with Dr.
Kimberly Harris –Drawdy (Georgia Southern University) to discuss the feasibility and
usefulness of the existing survey and possible data sets to address the researcher's topic and
questions. To access the existing survey and data the following steps were required:

   1. gain access to the data at Georgia Professional Standards Commission, the researcher
was granted permission by the original researcher for the project, Dr. Gerald Eads in April 2012,
in association with the Georgia Professional Standards Commission.

2. The data for this project was accessible under level three of the Professional Standards Commission policy. Level three places limits on fields within records. Information protected by state and federal law is excluded from access at this level, such as an educator's name, Social Security Number (SNN), Certificate Identification Number (CIN), address, and other personally identifying information. At this level Random Personnel Codes (RPC) may be assigned to record in place of certificate holder's name, SSN and CIN. RPCs are computer-generated and contain no embedded meanings. In this study, the RPC were removed.

Response Rate

Regarding the response rate, this was not applicable for this study because the data already existed and was not relevant for this study. In the state-wide survey, 15% of the respondents were special education teachers.

Summary

The shortage of special education teachers is a national concern that affects all regions of the US. Ninety-eight percent of school districts nationwide have shortages (Boyer & Gillespie, 2000). The literature review in Chapter 2 provided a distinct link between job satisfaction and mentoring. Chapter 3 provided details of the research methodology applied to answer the research questions to determine whether there was a link between the independent variables (mentoring and job satisfaction) and the dependent variable (mentoring).

This mixed methods study was an examination of the existing teacher survey data from the Department of Research and Evaluation at the Georgia Professional Standards Commission's 2007 Georgia Teacher Survey to establish a link between mentoring, job satisfaction and the retention of special education teachers. A commercial web-based survey software package was

employed to provide access to the survey and record responses. The Statistical Analysis System (SAS) was used to examine the relationship between mentoring and retention as well as job satisfaction, and retention. The qualitative data employed thematic analysis to explore the association between special education teacher retention, mentoring and job satisfaction by identifying underlying themes and describe the themes with illustrative quotes

CHAPTER 4

RESULTS

This mixed methods study with a triangulation design examined the existing data from the 2007 Georgia Teacher Survey (Eads, Nweke, & Afolabi, 2007). The purpose of this study was to determine whether a relationship existed between mentoring, job satisfaction and the intention of special education teachers to remain in the profession. This chapter is a presentation of the research findings. The chapter is divided into four sections. The first section provides descriptive data of the survey participant sample, and the next section is an analysis of the quantitative data obtained from the 2007- Georgia Teacher Survey. The third section provides a thematic analysis of the teacher responses to the open-ended questions from the survey. The section entitled Findings blends the qualitative and quantitative results in relation to the research questions.

Research Questions

The research questions addressed the overarching question regarding the relationship between mentoring, job satisfaction, and the retention of special education teachers. The specific questions were:

RQ1: Does job satisfaction impact a special educator's intent to leave or stay in the profession?

RQ2: Does the presence of a mentoring program affect the intent to leave or stay of special education teachers?

RQ3: Is there a relationship between mentoring, job satisfaction, and the intent to leave or stay for special educators?

Overview of Survey

The original survey data consisted of 19, 312 public school teachers. The original demographics were comprised of 84% women and 14% African Americans of the total survey respondents. Special education teachers represented about 15% of the respondents. The data below is a comparison of subject area representation from the Professional Standards (PSC) survey and the total number certified teachers in the state. The survey respondents closely mirror all teachers whether they participated in the survey or not.
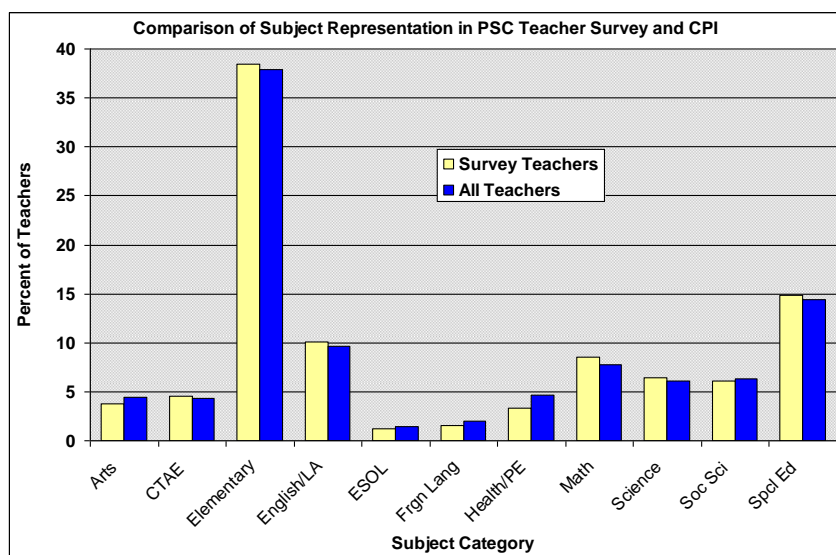
Figure 2. Comparison of subject representation in PSC teacher survey and CPI.

The purposive sample for this analysis consisted of the special education teachers representing the total demographics of Georgia public schools. The total number of special education respondents was a close representation of the state's actual population of special education teachers (special education teacher's represents 15% of the survey participants and 14% of the total number of teachers in the state). The responses to items II, III, IV, and V of the

Georgia Professional Standards Certified Teachers survey were analyzed using pre-existing

coding in an SPSS file that was provided by the primary researcher, Dr. Gerald Eads. Section II

of the survey consisted of demographic information. These survey items in section III were code

relative to mentoring, section IV consisted of open- ended questions as well as items dealing

with professional development, that were coded for job satisfaction and section V, dealt with

intent to stay.

Demographic of the Purposive Sample

Demographic characteristics of the sample are shown in Tables 1 through 5.

Table 1

Total Number of Special Education Teacher Survey Participant by Gender (N= 2836)

Gender	n	%	Cumulative %
Male	436	15	15
Female	2400	85	100

Table 2

Total Number of Special Education Teacher Survey Participants by Ethnicity (N= 2836)

Race	n	%	Cumulative %
White	2359	74	74
Black	450	16	90
Hispanic	17	5	95
Multi-Race	5	2.5	97.5
American Indians	3	2	99.5

Asian	2	.5	100

Table 3

Total Number of Special Education Teacher Survey Participants by Grade Level (N= 2836)

Grade Level	n	%	Cumulative %
K-5	1100	41.5	41,5
6-8	800	27	68.5
9-12	900	30	98.5
No Response	36	1.5	100

Table 4

Total Number of Special Education Teacher Survey Participants by Degree (N= 2836)

Degree	n	%	Cumulative %
Associate of Arts	104	1.21	1.21
Bachelor of Arts in Education	120	3	4.21
Bachelor of Science in Education	255	9	13.21
Bachelor of Education	151	6	19.21
Bachelor of Arts with a content	140	5	24.21
Bachelor of Science with a content	226	7	31.21
Masters of Art in Teaching	241	8	39.21

Masters of Education	671	25	64.21
Masters of Science in Education	119	4	68.21
Masters of Science	50	2.7	70.91
Masters of Education	129	6	76.91
Masters of Art	63	2.3	79.21
Specialist in Education	261	9	88.21
All But Dissertation	26	1.9	90.11
Doctorate of Education (no dissertation)	3	.10	90.21
Doctorate of Education (dissertation required)	21	.9	91.11
Doctorate of Philosophy	9	.28	91.39
Doctorate of Philosophy with a content	6	.21	91.6
Other degree	140	8	99.6
No Answer	11	.4	100

Table 5

Special Education Survey Participants Total Years of Experience in Education

Years of Experience	n	%	Cumulative %
0-3	580	19	19
4-6	531	16	35
7-10	568	17	52
11-15	324	12	64

| 16-20 | 248 | 15 | 79 |
| 20+ | 585 | 21 | 100 |

Quantitative Analysis Results

Logistic regression analysis was used to evaluate the influence of mentoring and job satisfaction on the outcome variable of interest, teacher retention. Logistic regression measures the relationship between a categorical dependent variable and usually a continuous independent variable. Logistic Regression analysis is similar to linear regression analysis except that the outcome is dichotomous (e.g. successful/failure, yes/no). Simple logistic regression analysis refers to the regression application with one dichotomous outcome and one independent variable. The outcome in logistic regression analysis is often coded as 0 or 1, where 1 indicates the outcome of interest is present and 0 indicates that the outcome of interest is absent (Sullivan, 2008).

Teacher retention was categorized as a binary variable, stay or leave (the actual response in any category type is binary, i.e. it records one of two possible conditions or outcomes). Teachers responded 'yes' or 'no' to whether they had mentoring when they began teaching. Two variables were used to describe job satisfaction. The first job satisfaction variable was whether the teacher had time and opportunity to discuss ideas and issues with other teachers at their current school. The second job satisfaction variable was whether opportunity for system-or-school-sponsored professional learning was available at their current school. The logistic regression models were adjusted (and adjusted findings as those resulting from statistical

adjustment during data analysis) for the following covariates of interest: birth year, race, gender, and number of years teaching. The quantitative control variable is called a covariate. The use of regression for this type of comparison is often called analysis of covariance. Race and gender are categorical variables, and more specifically, binary variables. Number of years teaching is a continuous variable.

The relationships between teacher retention and mentoring and teacher retention and job satisfaction were evaluated separately. Unadjusted (unadjusted findings are the bivariate relationship between an independent and dependent variable that does not control for covariates and adjusted models accounting for the covariates of interest) were considered. The full model included mentoring and job satisfaction. The probability modeled was "retention = no," i.e. teachers planned to leave the teaching profession at the end of the year.

Mentoring

The results of the unadjusted logistic regression model of teacher retention with mentoring as the independent variable is presented in Table 6 below. The p-value for mentoring was 0.1017, which is greater than the level of significance, 0.05. The P value or calculated probability is the estimated probability of rejecting the null hypothesis. The null hypothesis states that, there is no association between special education teacher retention and mentoring and there is no association between special education teacher retention and job satisfaction. The level of statistical significance is determined by the probability that this has not, in fact happened. In other words, significance levels show you how likely a result is due to chance. The corresponding confidence interval for the odds ratio of 1.23 contains 1, agreeing with the insignificance of the p-value. A confidence interval is a range around a measurement that

conveys how precise the measurement is. The confidence interval indicates tells the possible

range around the estimate and the stability the estimate. A stable estimate is one that would be

close to the same value if the survey were repeated (Department of Health, 2012). An odds ratio

(OR), is the measure of association between an exposure and an outcome. The OR represents the

odds that an outcome will occur given a particular exposure, compared to the odds of the

outcome occurring in the absence of that exposure. It can be suggested that the exposure of

mentoring is insignificant in relation to the outcome of retention.

Table 6

Odds Ratio Estimates of Teacher Retention with Mentoring

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Mentoring - No vs Yes	0.10	0.06	1.23	0.96	1.58

Note: A point estimate is the estimated value of a population parameter from a sample. A point estimate facilitates description of the relationship between variables.

The relationship between teacher retention and mentoring was considered in the presence

of the covariates of interest in Table 7. In this adjusted model, mentoring remained insignificant;

the p-value is 0.2001. Among the covariates of interest, the statistically significant variables are

race, gender, and number of years teaching. It can be inferred that race, gender, and number of

years teaching, can impact the intent of special education teachers.

Table 7

Odds Ratio Estimates for the Covariates of Interest: T=Relationship between Retention and

Mentoring.

Independent Variables	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Birth Year	0.0098	0.0082	1.01	0.99	1.03
Race - Non-White vs White	0.27	0.082	1.72	1.25	2.34
Gender – Female vs Male	-0.18	0.088	0.70	0.50	0.99
Number of Years Teaching	0.019	0.0095	1.02	1.00	1.04
Mentoring - No vs Yes	0.092	0.072	1.20	0.91	1.59

The odds ratio for race of 1.72 implies that the predicted odds of a teacher leaving for non-white teachers are 1.72 times the odds of leaving for white teachers. In other words, the odds of leaving the profession for non-white teaches are approximately 72% higher than the odds for white teachers. The odds ratio for gender is 0.70, implying that the odds of leaving for female teachers are 0.70 times lower than the odds of leaving for male teachers. In other words, the predicted odds of leaving for male teachers are 1.44 times the odds of leaving for female teachers.

The interpretation for number of years teaching is slightly different since it is a continuous variable. A continuous quantitative variable, is one that can theoretically be

measured in infinitely small steps (what mathematicians call "an arbitrary level of precision).

Continuous variables are interpreted with respect to percent change and unit increases in the

independent variables (Poulson, 2012). For number of years teaching, the odds ratio is 1.019. In

this case, a 1-unit increase in number of years teaching, i.e. an increase in number of years

teaching by 1 year, is associated with a 1.90% increase in the predicted odds of teacher retention

having a response of "no. This means that the longer a teacher stays in teaching, the less likely

they are to report that they intend to leave the profession.

Number of years teaching and birth year are both continuous variables. Table 8, below

presents the results of a t-test analysis. The means of number of years teaching and birth year are

presented by retention, yes or no. No significant differences between staying and leaving were

detected for either variable a shown in Table 8.

Table 8

Continuous Variables by Retention (Means and P-Values Reported)

Variable	Retention		
	No	Yes	P-Value
Number of Years Teaching	13.57	12.58	0.095
Birth Year	1963.1	1963.3	0.81

Job Satisfaction

Time and Opportunity to Discuss Ideas with Other Teachers

Table 9 represents the logistic regression analysis of the relationship between teacher

retention and job satisfaction, with respect to time and opportunity to discuss ideas with other

teachers resulted in a statistically significant relationship. Job satisfaction had a p-value of 0.0028, less than the level of significance of 0.05. The odds ratio of 1.52 implies that the predicted odds of a teacher leaving are about 52% higher for those who are dissatisfied with the amount of time and opportunity to discuss ideas with other teachers at their current school in comparison to teachers who were satisfied. Teachera who are dissatisfied, even with the opportunity share in the exchange of ideas, are still more likely to leave the profession.

Table 9

Odds Ratio Estmates for the Relationshp between Teacher Retention and Job Satisfaction: Time and Oppportunity

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Job Satisfaction (Time & Opportunity) - No vs Yes	0.21	0.071	1.52	1.16	2.01

In the adjusted logistic regression model of the relationship between teacher retention and time and opportunity to discuss ideas with other teachers (Table 10), job satisfaction was also significant. Among the covariates of interest, race, gender, and number of years teaching were statistically significant as represented in table 10. In other words, the opportunity for teachers engage in discourse can impact the intent to remain in the profession, specifically based on the race, gender and number of years teaching.

Table 10

Odds Ratio Estimates for the Covariates of Interest: The Relationship between Teacher Retention and Job Satisfaction: Time and Opportunity

Independent Variable	Beta	Standard	Odds	95% Confidence Limits

		Error	Ratio		
Birth Year	0.011	0.0082	1.01	0.99	1.03
Race - Non-White vs White	0.27	0.082	1.73	1.26	2.40
Gender – Female vs. Male	-0.19	0.088	0.69	0.49	0.97
Number of Years Teaching	0.024	0.0091	1.02	1.006	1.04
Job Satisfaction (Time & Opportunity) - No vs Yes	0.23	0.071	1.59	1.20	2.10

School or System Professional Development

The unadjusted logistic regression model of the relationship between teacher retention

and job satisfaction with respect to school or system professional development is presented in

Table 11. The p-value is 0.0904, greater than 0.05, so this representation of job satisfaction is

not statistically significant. This means that school or system-wide professional developments

do not impact a special education teacher's intent to stay.

Table 11

Odds Ratio Estimates for the Relationship between Teacher Retention and Job Satisfaction:

School or System Professional Development

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Job Satisfaction (Professional Development) - No vs Yes	0.19	0.11	1.47	0.94	2.31

The following Table 12 presents the adjusted logistic regression model of the relationship

between teacher retention and job satisfaction with respect to school or system professional

development. Job satisfaction remains insignificant in the presence of the covariates of interest.

Of the covariates, race, gender, and number of years teaching are statistically significant. In

respect to the intent to remain in the profession, race, gender, and numbers of years teaching has

the greatest impact.

Table 12

Odds Ratio for the Relationship between Teacher Retention and Job Satisfaction: School or

System Professional Development

Independent Variables	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Birth Year	0.0099	0.0082	1.01	0.99	1.03
Race - Non-White vs White	0.27	0.082	1.71	1.24	2.36
Gender - Female vs Male	-0.17	0.088	0.71	0.50	1.00
Number of Years Teaching	0.023	0.0091	1.02	1.00	1.04
Job Satisfaction (Professional Development) - No vs Yes	0.21	0.12	1.51	0.96	2.37

Time and Opportunity to Discuss Ideas with Other Teachers

and School or System Profession Development

Both job satisfaction variables were considered in the following model, Table 13, to

evaluate their influence on teacher retention. In the model, only job satisfaction with respect to

time and opportunity to discuss ideas with other teachers is statistically significant. The odds

ratio of 1.47 implies that the odds of leaving (retention=no) for dissatisfied teachers are 1.47

times the odds for satisfied teachers. In other words, the odd of leaving for a dissatisfied teacher

is 47% higher than the odds for satisfied teachers. This means that a dissatisfied special

education teacher is more likely to leave the profession.

Table 13

Odds Ratio Estimates for Job Satisfaction Variables on Teacher Retention

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Job Satisfaction (Time & Opportunity) - No vs Yes	0.19	0.073	1.47	1.11	1.96
Job Satisfaction (Professional Development) - No vs Yes	0.11	0.12	1.26	0.79	2.002

In Table 14, the adjusted logistic regression model containing both job satisfaction

variables, job satisfaction with respect to time and opportunity to discuss and share ideas with

other teachers is the only statistically significant job satisfaction variable. The odds ratio of 1.53

implies that the odds of leaving (retention=no) for dissatisfied teachers are 1.53 times the odds

for satisfied teachers. Race, gender, and number of years teaching are also statistically

significant.

Table 14

Odds Ratio Estimates for Both Job Satisfaction Variables

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Birth Year	0.011	0.0082	1.01	0.99	1.03
Race - Non-White vs White	0.28	0.082	1.74	1.26	2.39
Gender - Female vs Male	-0.18	0.088	0.69	0.49	0.97
Number of Years Teaching	0.024	0.0092	1.02	1.006	1.04
Job Satisfaction (Time &	0.21	0.074	1.53	1.15	2.04

Opportunity) - No vs Yes					
Job Satisfaction (Professional Development) - No vs Yes	0.12	0.12	1.27	0.79	2.03

Mentoring and Job Satisfaction

Finally, the full model, accounting for mentoring and job satisfaction, was evaluated in regards to teacher retention in Table 15. The unadjusted logistic regression model of the relationship between teacher retention and job satisfaction is presented in the following table. Of the three independent variables, only job satisfaction with respect to time and opportunity to discuss and share ideas with other teachers is statistically significant. The odds ratio of 1.46 implies that the odds of leaving (retention=no) for dissatisfied teachers are 1.46 times the odds for satisfied teachers. Therefore, the exposure (time and opportunity to share ideas) can impact the outcome (intent to stay) for special education teachers.

Table 15

Odds Ratio Estimates for Mentoring and Job Satisfaction in Regard to Teacher Retention

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Mentoring - No vs Yes	1.00	0.064	1.22	0.95	1.57
Job Satisfaction (Time & Opportunity) - No vs Yes	0.19	0.073	1.46	1.10	1.95
Job Satisfaction (Professional Development) - No vs Yes	0.12	0.12	1.26	0.79	2.01

The full model of the relationship between teacher retention and job satisfaction was also

evaluated with adjustment for the covariates of interest in Table 16. The results are presented in

the following table. As with the unadjusted model, of the three independent variables of interest,

only job satisfaction with respect to time and opportunity to discuss and share ideas with other

teachers is statistically significant. The odds ratio of 1.53 implies that the odds of leaving

(retention=no) for teachers dissatisfied with time and opportunity to discuss and share ideas with

other teachers are 1.53 times the odds for satisfied teachers. Among the covariates of interest,

race, gender, and number of years teaching are statistically significant.

Table 16

Odds Ratio Estimates the Relationship between Teacher Retention and Job Satisfaction for the

Covariates of Interest

Independent Variable	Beta	Standard Error	Odds Ratio	95% Confidence Limits	
Birth Year	0.011	0.0082	1.011	0.99	1.03
Race - Non-White vs White	0.28	0.082	1.75	1.27	2.41
Gender - Female vs Male	-0.20	0.088	0.68	0.48	0.96
Number of Years Teaching	0.021	0.0096	1.021	1.002	1.04
Mentoring - No vs Yes	0.088	0.072	1.19	0.90	1.58
Job Satisfaction (Time & Opportunity) - No vs Yes	0.21	0.074	1.52	1.14	2.04
Job Satisfaction (Professional Development) - No	0.12	0.12	1.27	0.79	2.03

vs Yes

Bivariate Relationships with Retention

Table 17, presents the categorical variables of interest and evaluates them in conjunction

with the outcome variable of interest, retention; categorical variable yield data in the categories.

Frequencies are presented, along with odds ratios (OR) and p-values. The level of significance is

0.05. Race and job satisfaction with respect to time both have statistically significant

relationships with retention. For race, the odd of a non-white teacher leaving the teaching

profession is 1.57 times the odds of a white teacher leaving the teaching profession. For job

satisfaction with respect to time, the odd of a teacher who is dissatisfied with the time to share

ideas with other teachers leaving the teaching profession is 1.53 times the odds of a satisfied

teacher.

Table 17

Categorical Variables by Retention- Frequencies, Odds Ratios and P-Values Reported

Categorical Variable		Retention			
		Yes	No	OR	P-Values
Gender	Male	252	1502	0.73	0.067
	Female	51			
Race	Non-White	61	238	1.57	0.004
	White	242		1.487	
Mentoring	No	174	902	1.22	0.107
	Yes	129		819	

Job Satisfaction - Time	No	88	367	1.53	0.002
	Yes	207		1324	
Job Satisfaction - Professional	No	26	106	1.44	0.11
Development	Yes	272		1595	

Qualitative Results

The qualitative data used thematic analysis to explore the association between special education teacher retention, mentoring and job satisfaction by identifying underlying themes along with illustrative quotes. The themes were derived from prior studies on retention, mentoring, and job satisfaction. Darling- Hammond (2003) identified four major factors that strongly influence whether and when teachers leave specific schools or education profession entirely: salaries, working conditions, preparation, and mentoring support in the early years. In regards to mentoring, studies have indicated that peer coaching provides beginning teachers with the opportunity to get together several times a school year to share ideas, discuss problems, or confide in each other. In peer coaching, two or three teachers with varying levels of experience observe each other's lessons, share strategies, discuss solutions to problems, or conduct research in the classroom on a weekly or daily basis (Robbins, 1991). The investigation was designed to explore several factors that the literature identified as influencing teacher retention. These factors are: supportive administrators, job satisfaction, commitment, school climate, and mentor programs (Nickson & Kritsonis, 2006).

An analysis of the teacher's response to the open-ended questions from the 2007 survey resulted in an overall theme of support. The open-ended questions asked the following:

1. How do you think the induction or mentoring program(s) you helped with could be improved?

2. What do you think is absolutely the most important thing that could or should be done to help teachers stay in teaching?

3. We apologize if it's redundant to what you've told us earlier, but what is the most important reason for the choice you made here?

Table 18 represents the teacher responses to the question dealing with mentoring. The comments yielded themes relative to, the need for structured guidelines relative to mentoring program, time and opportunity for mentors and mentee to meet as well as the value of the support mentoring programs provide. Survey participants provided some of the following responses relative to mentoring:

Table 18

How do you think the induction or mentoring program(s) you helped with could be improved?

Prominent Themes	Teacher Comments
Support	
	Probably the most valuable support a new teacher can receive is from another teacher who has "been there." I believe at least one hour a week should be provided for a new teacher and his/her mentor to meet during the school day in order for this to happen."
	"Consistency of support from school administrators."

Structured Program and Guidelines

"The mentoring program could be more organized and structured. The responsibility should be shared between mentor and protégé, but ultimately the administration should accept the primary role of instructing the mentor so that he/she can effectively guide their protégé."

"There is no clear system for mentoring in my system. If a core group of teachers were hand selected to be trained to be mentors and there were things in place to monitor them and their new teachers, it may help. "

"I think that new teacher/mentor programs need to have some strict guidelines to expectations of the mentor and of the teacher. These teacher/mentors need to have a specific time where they can work together, observe each other, and provide positive/negative feedback. With all that is required, the mentor should be one from within the department, especially Special Education. Right now, the only time we can meet is after school or on planned staff days (if time allows). That is not nearly enough time to do anything of true value and it leads to frustration. Even if the teacher is only new to the school and not necessarily the system, they need a mentor to get familiarized with the new school and all that may be different when they were somewhere else.

Time and Opportunity

"Actually let the mentor/mentee have time together (like common planning period) during school hours."

"By extending the program to include weekly sessions for the entire year, not just assigned to you on as needed basis.   Thoughtful paring of mentor's and new teachers.   More consideration given to just the daily day to day workings of the school, system,

and classroom expectations."

"The induction or mentoring program could be improved by allowing more time if needed by the new teacher. There should be more professional learning when it comes to the induction or mentoring program (s)."

"It would be helpful is the mentoring teacher taught in the same area as the new teacher. It would be helpful if the new teacher was provided time during the school day to receive assistance. Perhaps the mentoring teacher could spend some time in the classroom with the new teacher so they could work together with the new teacher's class in areas the new teacher identifies as difficult for the new teacher and her class."

Table 19 represents comments regarding participants' responses to those what can be done to help special education teachers remain in teaching. The following themes emerged: support, mentoring and pay.

Table 19

What do you think is absolutely the most important thing that could or should be   done to help teachers stay in teaching?

Prominent Themes	Teacher Responses
Support	
	"Administrators need to provide teachers, especially new teachers, with as much support as possible with classroom management and discipline. Also, teacher accountability for students to pass required tests places a lot of stress on educators. They fear losing their job. There are many teachers who do very well in the classroom. However because of lack of

	student motivation and lack of parental support, these teachers are blamed for these students not passing the tests." "We need support and back-up in decisions we make in the classroom that affect classroom management, such as discipline referrals. We look like idiots when we write someone up and it either is not handled efficiently or it is not handled at all!!" "Support from building level and better pay give them more support and compensation; Lots of support, encouragement, and modeling the first couple of years- especially with classroom management." "Support and understanding are needed to retain teachers. We are doing all that we can do with the inconsistency."
Mentoring	
	"Provide a mentor for the first years; Longer training period / an apprenticeship so that a teacher could work with a veteran teacher for an extended period of time. Putting teachers where they have received the training. Provide more technical training in technology. It makes them a better teacher." "Mentoring for new teachers; support from administration; time to plan with veteran teachers." "First, we need our Special Education Support Teachers back for next year -- this will ease the paperwork at the school. Second, a state-wide mandatory mentoring program should be in effect so that new teachers and new to the county teachers get the support they need for teaching, policies, issues, behavior, and politics."

Pay	
	"Teachers should be paid based on their work, not just their education level. Too many times we see teachers with top degrees who are not the best teachers in the classroom. I would like to see pay for the job done in the classroom, like in the business world. "
	"Competitive salary and early teacher support which includes proper training prior to teaching. Maybe have some sort of "team teaching" year for new teachers."
	"Pay, planning time, supported instruction, and conditions in the school. Pay needs to remain competitive to the other states. We need to be able to use our planning time to do what we need to do and not attending meetings all of the time. More time needs to be set aside to give the supported instruction to new teachers on how things are to be done in a particular school system. Better technology is a must for the classrooms."

Tables 20 and 21, below represents the survey participant's sample comment regarding their reason to leave or stay in teaching. The theme that developed around the rationale to leave were: Lack of Support. , Retirement, and Paperwork. The prominent themes relative to staying were: Support and Relationships.

Table 20

We apologize if it's redundant to what you've told us earlier, but what is the most important reason for the choice you made to leave?

Prominent Themes	Teacher Response
Lack of Support	
	"Feeling backed into a corner without support, and overwhelmed with the demands that now accompany the field in which I am employed will most likely encourage my decision to leave the profession."
	"I want to work with students I can help. One of the administrators and many of the teachers here are not very supportive or motivating. More should be willing to help out. Some think that they are the only ones that can teach. Some teachers actually turn the other way when you say good morning. I have never experienced such rudeness among adults."
Retirement	
	"I have made my choice to retire. My mind and body are physically tired. I accumulated over 200 days of sick leave so I will be able to retire with at least 30 years of service. I never married or had children. It was never intended to be that way, but I will say that my life spent in teaching was total dedication. I would like to have stayed a while longer since I will only be 50 when I retire, but I have to say that I am discouraged at this point. Maybe I will go back later and work part time or something. Only time will tell. I will, however, miss the teaching aspect of working with the kids. That has and will always be the best part of teaching. Until something changes and/or the top officials start listening to their teachers, I am afraid that the system will lose a lot of good teachers in due time."
	"I am close to retirement--this May I will complete 29 years in education--I had always hoped to teach beyond the 30 years required for retirement--that is no longer what I desire to do-"
Paperwork	
	"Excessive paperwork will continue to impact the teacher shortage in Georgia, whether that excess is due to "No Child Left Behind," or due to state or

local requirements. The teacher shortage in Georgia now is only "the tip of the iceberg," to use a trite expression. New teachers coming into and remaining in teaching, whether through the conventional or "fast-track" methods, will not keep up with the demand and with the increase in population. In 5 to 10 years, attrition will create a very real crisis with the teacher shortage. "They haven't seen anything yet," regarding a teacher shortage in Georgia. Currently, teaching carries too much "baggage," including very excessive paperwork, increased time after school and on weekends teachers have to invest in order to "keep up," the politics in many local school systems, having to "teach to the test," and continual student discipline issues."

"As a special ed. teacher, I simply am burned out with all the paperwork, documentation, and other "things" that go along with teaching."

"I've worked in the field of special education for 15 years now. The enormous load of paper work in special ed has gotten me to a point that I feel like I can't give time to my students and simply teach. I hate that! I want to teach my kids, not always be under pressure to do this IEP or that IEP, or this pack of forms, or that pack of forms, etc., etc. I'm ready to make a move into regular education, and spend my time doing all the regular load of paper work involved in teaching, focusing on teaching my students with gusto and love. I love teaching, and don't want to leave the profession. But at this point, if I could move into another field making more money, still being able to work with students in some capacity, I'd be doing some serious praying about it."

Table 21

We apologize if it's redundant to what you've told us earlier, but what is the most important reason for the choice you made to stay?

Prominent Theme	Teacher Response
Support	

"I love the school and the people that work there; Family and support of the staff is very important to me. The willingness for our school to function as a unit is important to me."

"Great supportive administration in a supportive system with excellent teachers."

"I love teaching at my school. I enjoy coming to school each day and helping my students learn. I love the support I have at school."

"Overall I feel supported, understood and appreciated at this school - and the school system. The students are a pleasure and so, usually, are the parents. We have resources to reach educational goals that many do not have. This makes accomplishing the educational goals set forth more realistic and often pleasurably rewarding."

"I have been here 14 years and have no desire to go anywhere else. I love the teachers, my students, and my administration. It is a very nurturing and caring environment. The Special Ed. teachers are wonderful and as I indicated except for too much paper work and the money issue, I love my job."

"I love the school where I teach. If I were still at my other school, I probably would have quit. I did not think to mention before, but the single most important element in a school is an excellent principal-someone who is on your side and who gets what teaching is all about. My take on 'poor' schools is that they get the incompetent administrators and then the teachers leave. Teachers don't always leave

	because they are in a poor school, they leave because they are not supported, valued, and given space and supplies to teach. They leave because they teach next to incompetent teachers who enjoy the same rewards they do because the principal does not want to make waves, or is so incompetent themselves they cannot recognize it for what it is. I have discovered that administrators make a huge difference, and that the schools who get the good ones are the schools where the parents know the difference between good and bad, and demand good."
Relationships	
	"I love the students that I work with. I have a great administrative team to work for. They are supportive, understanding and helpful. I also have great co-workers."
	"I work with some excellent professional people who make teaching an enjoyable experience."
	"This is my community and the folks that will take part in my future."
	"I like my friendships I have made here and enjoy teaching in this school system."
	"I love the interaction with students and my peers."
	"My school is a place where I currently have support, although the whole "sped team" may lack it at times, I personally am surrounded by friends and co-workers that are like family. When general ed is open to change and the new "Special ed" there is no better place to be."
	"I will continue to teach at this school because I am so blessed with colleagues who

demonstrate care, compassion, intelligence,
and support--on a regular basis. My
administrators are present, offer
encouragement, and display much
professionalism. However, the 'most
important' reason is that I know as long as this
building is a school, there will be students."

Findings

RQ1: Does job satisfaction impact a special educator's intent to leave or stay in the profession?

The relationship between teacher retention and job satisfaction, with respect to time and opportunity to discuss ideas with other teachers resulted in a statistically significant relationship. Job satisfaction had a p-value of 0.0028, less than the level of significance of 0.05. The odds ratio of 1.52 implies that the predicted odds of a teacher leaving are about 52% higher for those who are dissatisfied with the amount of time and opportunity to discuss ideas with other teachers at their current school in comparison to teachers who were satisfied. The relationship between teacher retention and job satisfaction with respect to school or system professional development, the p-value was 0.0904, greater than the level of significance of 0.05, so job satisfaction is not statistically significant. This means that a special education teacher's intent to stay in the professional is not impacted by school or system-wide professional development.

When considering time and opportunity to discuss with other teachers and school system professional development job variables, only job satisfaction with respect to time and opportunity to discuss ideas with other teachers is statistically significant. The odds ratio of 1.47 implied that the odds of leaving (retention=no) for dissatisfied teachers are 1.47 times the odds

for satisfied teachers. In other words, the odds of leaving for dissatisfied teachers are 47% higher than the odds for satisfied teachers.

When considering the themes as to why special education stays in terms of implied job satisfaction, teacher indicated the importance of support and relationship. The following comments could be implies as job satisfaction: "I will continue to teach at this school because I am so blessed with colleagues who demonstrate care, compassion, intelligence, and support--on a regular basis. My administrators are present, offer encouragement, and display much professionalism. However, the 'most important' reason is that I know as long as this building is a school, there will be students." "I have been here 14 years and have no desire to go anywhere else. I love the teachers, my students, and my administration. It is a very nurturing and caring environment. The Special Ed. teachers are wonderful and as I indicated except for too much paper work and the money issue, I love my job."

RQ2: Does the presence of a mentoring program affect the intent to leave or stay of special education teachers?

Teacher retention with mentoring as the independent variable, the p-value for mentoring was 0.1017, which is greater than the level of significance, 0.05. The corresponding confidence interval for the odds ratio of 1.23 contains 1, agreeing with the insignificance of the p-value, which implies that mentoring is insignificant relative to retention.

When teachers were asked what could be done to help them stay, mentoring was among those factors teacher indicated. The following comments regarding the impact of mentoring on the decision to remain in teaching was made: "First, we need our Special Education Support Teachers back for next year -- this will ease the paperwork at the school. Second, a state-wide

mandatory mentoring program should be in effect so that new teachers and new-to-the-county

teachers get the support they need for teaching, policies, issues, behavior, and politics." "Provide

a mentor for the first years; Longer training period / an apprenticeship so that a teacher could

work with a veteran teacher for an extended period of time. putting teachers where they have

received the training. Provide more technical training in technology. It makes them a better

teacher."

RQ3: Is there a relationship between mentoring, job satisfaction, and the intent to leave or stay

for special educators?

The relationship between teacher retention, mentoring, and job satisfaction was

considered, of the three independent variables, only job satisfaction with respect to time and

opportunity to discuss and share ideas with other teachers is statistically significant. The odds

ratio of 1.46 implies that the odds of leaving (retention=no) for dissatisfied teachers are 1.46

times the odds for satisfied teachers. When compared to the response by teachers regarding the

reason they remain in teaching, mentoring along with supports, were among those factors that

were indicated as reason to stay. The following comment regarding support could be implied as

job satisfaction, : "I will continue to teach at this school because I am so blessed with colleagues

who demonstrate care, compassion, intelligence, and support--on a regular basis. My

administrators are present, offer encouragement, and display much professionalism."   The

specific comment regarding mentoring, speaks to the value of mentoring on the teacher's

decision to stay: "First, we need our Special Education Support Teachers back for next year --

this will ease the paperwork at the school. Second, a state-wide mandatory mentoring program

should be in effect so that new teachers and new to the county teachers get the support they need

for teaching, policies, issues, behavior, and politics." The blending and analysis of the quantitative and qualitative data yielded results that suggested that, mentoring is insignificant relative to the retention of special education teachers intent; while support regarding time and opportunity to meet with colleagues is significant for overall job satisfaction.

Summary

Chapter 4 was a presentation of the analysis of the data and information collected in respect to the relationship between mentoring, job satisfaction, and the retention of special education teachers. The pre-existing data from the 2007- Georgia Teacher Survey was presented and analyzed. The final section of the chapter established the correlation between the data and the research questions of the study. A summary of the findings drawn from the data related to the research question is presented in Chapter 5.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The previous chapter was an examination of the results and aimed at addressing the research questions of the study. This chapter is divided into five sections that provides further examination of the results, through discussion of the findings and the implications connected to the research outcomes. Section one summarizes the study; section two presents and analysis of the major findings of the study in two parts. The two parts includes discussion of survey quantitative findings and discussion of the survey open-ended questions, qualitative findings, in relations to the literature in Chapter 2. Section three considers the data in relation to the socio-cultural theory, the conceptual framework. Section four suggests implications of this study for the field of educational leadership. Finally, section five, the conclusion, identifies recommendations from the researcher based on the findings, as well as, how the researcher plans to disseminate the findings of the study with those stakeholders who impact educational leadership.

Summary of the Study

The purpose of this study was to determine whether a relationship exists between mentoring, job satisfaction and the intent of special education teachers to remain in the teaching profession. The causes of the teacher shortage are complex; however, the retention of special education teachers is a significant contributor to this shortage (Billingsley, 2004). About 13.2% of special education teachers vacate their positions annually; 6.0% leave the teaching profession entirely, while the remaining 7.2% migrate to general education positions (Plash & Piotrowski,

2006). The shortage of special education teachers is a national concern that affects all regions of

the United States, ninety-eight percent of school districts nationwide have shortages (Bergert &

Burnette, 2001; Boyer & Gillespie, 2000). The National Center for Educational Studies indicate

that 6% of nation's teachers leave the profession within the first year and 20% of all newly hired

teachers leave within 3 years. The dissatisfaction of novice teachers has a major impact on their

retention, according to Woods and Weasmer (2004). Woods and Weasmer further indicated that

factors such as benefits of collegial investment, shared leadership, support meetings, and

mentoring lessen job dissatisfaction. According to the National Education Association (NEA,

2013), new teachers who participate in induction programs like mentoring are twice as likely to

stay in the profession. It is believed that mentoring programs can cut the dropout rate from

roughly 50% to 15 % during the first 5 years of teaching (Brown, 2003).

Job dissatisfaction is a factor that causes a mass exit of teacher from major content fields,

especially those hard to fill fields. One field that has the lowest teacher retention rate is special

education. According to Brownell, Hirsch, and Seo (2004), a dramatic shortage exists within

special education nationwide. Many special educators do not survive the path from hopeful

beginner to highly qualified, experienced teacher. White and Mason (2001) along with Whitaker

(2000) suggested mentoring programs supported by other teacher induction processes result in

significantly higher retention rates for special education teachers than induction programs

without mentoring (White & Mason, 2001; Whitaker, 2000). Woods and Weasmer (2004),

suggest that mentoring support increase job satisfaction, which aids in the overall retention of

teachers. Over 40 years ago, the state of Georgia implemented a statewide new-teacher

induction program (Young, 2007). The Georgia Beginning Teacher program, initiated in 1980,

was one of the first new teacher programs in the US. Because of the long standing practice, the

researcher was interested in determining if this initiative; begun over four decades ago (Young

2007) was recognized by teachers as a reason why they had the intention to remain in their

special education position.

A selected portion of the existing data from the 2007 Georgia Certified Teacher Survey

GCTS-PSC-2007 (Appendix B) was used to examine the responses provided by special

education teachers in the state. The purpose of the original survey conducted by the Georgia

Professional Standards Commission (PSC) was to investigate the rationale of teachers for

remaining in or leaving why teaching. The original survey data consisted of 19, 312 public

school teachers. The original demographics were comprised of 84% Women and 14% African

Americans of the total survey respondent. Special education teachers represented about 15% of

the respondents. The initial section of the survey was constructed containing open-ended and

multiple-response items to gather information on preparation history and degrees awarded. A

second section concerning experience with mentoring both as a mentee and as a mentor was

included next. Multiple response items were then constructed for each of the seven remaining

areas. The present study examines secondary data from both the quantitative and qualitative

aggregated from the GCTS-PSC 2007 by Drs. Eads, Nweke and Afolabi, research associates at

the PSC in 2007. The secondary data analysis in this study was reviewed to determine the

relationship between mentoring, job satisfaction and the intent of special education teachers to

stay or leave the teaching profession. The purposive sample (n = 2836) included the total

number of special education teacher respondents to the survey from Georgia public schools and

their responses to items II, III, IV, and V of the survey. Item II was an open-ended question that

asked respondents what they liked most and least about teaching and what they would change. Item III dealt specifically with mentoring; item IV asked questions regarding reason for teaching; item V asked respondents about intent. The total number of special education respondents in the study is a close representation of the State of Georgia's actual population of special education teachers (special education teacher's represented 15% of the survey participants and 14% of the total number of teachers in the state). The investigator sought to determine if the responses of special education teachers on the items coded for job satisfaction and mentoring would correlated with what they indicated regarding intent to stay or leave the profession.

Is there a relationship between mentoring, job satisfaction, and the intent to stay for special education teachers? This overarching question guided the study, along with three additional questions. An analysis of the data indicates that there is no relationship when comparing job satisfaction and mentoring as independent variable on the outcome of retention as an dependent variable. Of the variables, only job satisfaction with respect to time and opportunity to discuss and share ideas with other teachers was statistically significant, the p-value of 0.0028 is less than the level of significance of 0.05 (p-value). This seems to indicate that the opportunity to be involved in collegial discourse with peers results in a positive outcome in respect to the intent of special education teachers

Research Question 1 asked: does job satisfaction impact a special educator's intent to leave or stay in the profession? The answer to this question is embedded in a portion of section IV of the GTS-PSC 2007 which examined professional development. These questions were included in the professional development section of the original survey and were coded as "job satisfaction." by the original researchers. The relationship between teacher retention and job

satisfaction with respect to school or system professional development yielded a p-value is 0.0904, so this representation of job satisfaction is not statistically significant. This means that school or system-wide professional developments do not impact a special education teacher's intent to stay. The data indicated that the relationship between teacher retention and job satisfaction, with respect to time and opportunity to discuss ideas with other teachers resulted in a statistically significant relationship. The odds of leaving for a dissatisfied teacher is higher than the odds for satisfied teachers. This means that a dissatisfied special education teacher is more likely to leave the profession. The quantitative data regarding job satisfaction (time and opportunity to discuss ideas) provided some correlations to what special education teachers said regarding a well-structured mentoring program. When respondents were asked about mentoring, they indicated, that time and opportunity for mentors to meet with mentee, (a common and designated time) to share and discuss ideas is an important component of a successful mentoring program.

When considering at the bivariate relationship for retention, the categorical variables of interest, race and job satisfaction with respect to time and opportunity, both have statistically significant relationships with retention. In other words, the opportunity for special education teachers to engage in professional discourse with their peers seems to impact their intent to remain in the profession. The data indicated that this is especially true for whites and females In regards to time ad opportunity, a teacher indicated that, "The induction or mentoring program could be improved by allowing more time if needed by the new teacher. There should be more professional learning when it comes to the induction or mentoring program (s)."

Research Question 2 states: Does the presence of a mentoring program affect the intent to leave or stay of special education teachers? The GCTS-PSC 2007 quantitative data suggested mentoring did not have an impact on special education teachers' intent to stay in the profession. When considering the covariates of interest for mentoring and teacher retention, race, gender, and number of years teaching positively impacts the intent of special education teachers. This means that race, gender, and number of years teaching can impact the intent to stay of special education teachers. Also, while mentoring cannot be considered as a broad stroke approach to retention, it can have a narrow targeted impact on specific groups. When asked, what was important for them to stay, special education teachers indicated mentoring as an important factor. A teachers, responded, "Provide a mentor for the first years; longer training period / an apprenticeship so that a teacher could work with a veteran teacher for an extended period of time." What the data indicated and the responses provided to the opened questions by teachers yielded different results as it related to importance of mentoring on their intent to stay in the profession.

Discussion of the Survey Quantitative Findings

Mentoring

Logistic regression analysis was used to evaluate the influence of mentoring and job satisfaction on the outcome variable of interest, teacher retention. The relationships between teacher retention and mentoring and teacher retention and job satisfaction was evaluated separately as well as the full model of mentoring and job satisfaction relative to intent to remain in the profession. The examination of mentoring and teacher retention/intent yielded a p-value for mentoring was 0.1017, which is greater than the level of significance, 0.05. The

corresponding confidence interval for the odds ratio of 1.23 contains 1, agreeing with the

insignificance of the p-value. This means that mentoring did not impact teachers' intent to

stay/retention and therefore is insignificant. Therefore, the null hypothesis which states that

there is no association between special education teacher retention and mentoring is accepted.

This is contrary to the study by Smith and Ingersoll (2004), which concluded that those who

experienced induction and mentoring support in their first year of teaching were less likely to

leave teaching or change schools. Also, according to Darling-Hammond (2003), a well-designed

mentoring programs raises retention rate for new teachers by improving their attitudes, feelings

of efficacy, and instructional skills. Also, according to the National Education Association

(NEA, 2002), new teachers who participate in induction programs like mentoring are twice as

likely to stay in the profession. It is believed that mentoring programs can cut the dropout rate

from roughly 50% to 15 % during the first 5 years of teaching (Brown, 2003). While the existing

study does not support the works of Darling-Hammond and the NEA, other types of relationships

similar to mentoring is reported as significant by special education teachers in regards to their

intent to remain in the field.

The relationship between teacher retention and mentoring was also considered in the

presence of the covariates of interest. The covariates were birth year, gender, race, and number

of years teaching. The covariates data indicated that, with an odds ratio for race of 1.72, the

predicted odds of a non-white teachers leaving are greater. The odds ratio for gender of 0.70

implies that the odds of leaving for female teachers are lower than the odds of leaving for male

teachers. In other words, the predicted odds of leaving for male teachers are greater than female

teachers. Although the overall odds to the exposure of mentoring for special education teachers

is insignificant, in determining their intent to stay, it can be a determining factor for whites and females.

For number of years teaching, the odds ratio was 1.019. In this case, a 1-unit increase in number of years teaching, i.e. an increase in number of years teaching by 1 year, is associated with a 1.90% increase in the predicted odds of teacher retention having a response of "no. This means that the longer a teacher stays in teaching, the less likely they are to report that they intend to leave the profession. Those special education teachers with greater than 20 years of experience in the purposive sample for this study constituted the largest of participants at 21%. When comparing the current study to a report by the New York City Council Investigation Division (2004) it finds similar results. In this study, teachers with greater than 6 years of experience represented 65% of the total respondents. In the New York City study, nearly 30% of teachers with 5 years' experience or less say it is unlikely that they will still be in the NYC school system. This study also supports The Pathways to Teaching Careers program at Armstrong Atlantic State in Savannah, Georgia and the Teacher Induction Program at Texas A & M University reported a retention rate of 100 % for teacher with over 5 years of experience. This seems to indicate that the longer a teacher stays in teaching, the less likely they are to report that they intend to leave the profession.

Job Satisfaction (Time and Opportunity to
Discuss Ideas with Other Teachers)

The GCTS-PSC 2007 survey examined job satisfaction by the responses teacher as measured by those questions regarding time and opportunity to discuss ideas with other teachers and school or system professional development. The examination of job satisfaction and

retention, with respect to time and opportunity to discuss ideas with other teachers resulted in a statistically significant relationship. Job satisfaction had a p-value of 0.0028, less than the level of significance of 0.05. The odds ratio of implied that the predicted odds of a teacher leaving are about 52% higher for those who are dissatisfied with time and opportunity to share and discuss ideas. This data is parallel to Ingersoll's study (1997) that examined the effects of both school level measures of having a mentor and effective assistance, on teacher job satisfaction. Ingersoll's analysis showed effective assistance had a strong positive effect on job satisfaction. Teachers reported more job satisfaction in schools where the faculty on average reported more effective assistance for new teachers. In this study, among the covariates of interest, race, gender, and number of years teaching, there was statistical significance relative to time and opportunity to share and discuss ideas. In other words, the opportunity for teachers to engage in discourse with colleagues seemed to impact the intent to remain in the profession, specifically based on the race, gender and number of years teaching.

Job Satisfaction (School or System

Professional Development)

The literature indicates the value and importance of developing site/school based collegial relationships and its impact on job satisfaction and retention. Support systems within the school environment, provided by teacher education programs and local school administration are essential elements in the retention of beginning teachers (Inman and Marlow, Summer, 2004). Therefore, the finding indicating retention and job satisfaction with respect to school or system professional development as not being statistically significant correlates with the Inman and Marlow study(2004). It seems evident that providing system professional development is

not sufficient in retaining special education teachers. Unlike the support offered through professional development, time and opportunity to discuss and share ideas with other teachers, significantly affects a teacher's reported intent to remain in the profession based on the data in this study.

Mentoring and Job Satisfaction

Johnson and Kardos (2005) outlined steps school leaders can take to bridge the generation gap and build integrated professional culture in which new and experienced teachers collaborate regularly and share responsibility for the success of their students as well as strategies to integrate the work of new and experienced teachers. One such strategy included assigning new teachers to work alongside experienced teachers. This allows new teachers the opportunity to tap the veteran's knowledge and the veterans can get energized by the new teachers' enthusiasm. In the current study, when considering mentoring, job satisfaction, and retention, only job satisfaction with respect to time and opportunity to discuss and share ideas with other teachers is statistically significant. The odds ratio of 1.46 implies that the odds of leaving (retention=no) for dissatisfied teachers are 1.46 times the odds for satisfied teachers. Therefore, the exposure (time and opportunity to share ideas) can impact the outcome (intent to stay) for special education teachers. The items in the Georgia Professional Standards 2007 teacher survey items coded job satisfaction (time and opportunity), could also be considered mentoring as well, given the fact that a successful well-designed mentoring program provides time and opportunity to share ideas with colleagues. Gehrkel and McCoy (2007) concluded that a school environment, or 'village,' that supports the resilience and determination of beginning special education teachers improves the likelihood of them remaining in the profession. The

responses from the GPS 2007 teacher survey seem to indicate that the relationship that is the most like mentoring (time and opportunity to share ideas) also improves the likelihood that teachers will remain in the profession.

In the late 1990s, Eberhard, Reinhardt-Mondragon and Stottlemeyer (2000) conducted a study of beginning teacher attrition in South Texas that included data on the effects of mentoring on beginning teachers. Those who reported spending more than 1 hour per week with their mentor were more likely to say they planned to continue (90%) than were those who had less than 1 hour per week of contact time (76%). Those satisfied with mentor program were also more likely to say they planned to continue in teaching (86 %) than those who said they were dissatisfied with the program (79%).

Based the coding for job satisfaction in this study, it can be suggested that job satisfaction equals time and opportunity to meet and share ideas. The study also provides feedback that suggests that a successful mentoring provides time and opportunity for mentors and mentee to meet for sharing and support. We can therefore draw the conclusion that job satisfaction, mentoring and retention are correlated. Woods and Weasmer (2004) indicated that such factors as benefits of collegial investment, shared leadership, support meetings, and mentoring lessen job dissatisfaction. Bolger (2001) reported that satisfaction in general is linked to retention.

Discussion of the Survey Qualitative Findings

An analysis of the teacher's response seemed to indicate that most of the responses focused on the need for support with instruction, policies, behavior, and networking. The qualitative data used thematic analysis to explore the association between special education teacher retention, mentoring and job satisfaction by identifying underlying themes along with

illustrative quotes. The opened questions asked the following: How do you think the induction

or mentoring program(s) you helped with could be improved, and what do you think is

absolutely the most important thing that could or should be done to help teachers stay in

teaching? We apologize if it's redundant to what you've told us earlier, but what is the most

important reason for the choice you made here?

How do you think the induction or mentoring program(s)

 you helped with could be improved?

Those survey participants, who responded "yes" to mentoring and how mentoring could

be improved, indicated a need for support, more structure program guidelines, and time and

opportunity. When teachers provided comments about support, they shared the need for more

time or a designated time to meet as a mentoring team, as well as support from administration

regarding student behavior and the interpretation of policy. The concerns with support were

similar to the concerns regarding time and opportunity to discuss and share ideas. Teachers

expressed concerns regarding the need for a common planning time or an established time to

meet, and a mentor from their same subject area. For example, survey participants stated, "It

would be helpful if the mentoring teacher taught in the same area as the new teacher. It would be

helpful if the new teacher was provided time during the school day to receive assistance; the

teacher/mentors need to have a specific time where they can work together, observe each other,

and provide positive/negative feedback." The comments provided by the teachers correlated

with current literature by Ingersoll and Smith (2003) that indicated that having a mentor in the

same field reduced the risk of leaving at the end of the first year by about 30%. Also the

guidelines provided by the Council for Exceptional Children's mentoring program (MIP)

recommends that each new professional in special education should receive a minimum of a 1

year mentorship during the first of his or her professional special education practice in a new

role. The mentor should be an experienced professional in the same or similar role that can

provide expertise and support on a continuing basis. The qualitative responses offered support

for a structured and designated time for mentors and mentees from similar content areas to meet

for idea sharing and support.

What do you think is absolutely the most important

thing that could or should be done to help teachers

stay in teaching?

When teachers in GCTS-PSC 2007 survey were asked what can be done to help special

education teachers remain in teaching, they indicated that support, mentoring and pay were key

factors when making this decision. The responses provided by the teachers in PSC survey are

similar to Darling-Hammond (2003) in her article on *Keeping Good Teachers*; she identified four

major factors that strongly influence whether and when teachers leave specific schools or

education profession entirely: salaries, working conditions, preparation, and mentoring support

in the early years. The teacher feedback in this study regarding support, focused mostly on

administrative or school-based support. A teacher commented, "I have been here 14 years and

have no desire to go anywhere else. I love the teachers, my students, and my administration. It is

a very nurturing and caring environment. First, we need our Special Education Support Teachers

back for next year -- this will ease the paperwork at the school; second, a state-wide mandatory

mentoring program." The comments regarding pay are similar to the comments from other

professions, especially during the economic condition of the country as a whole when the survey

was administered. Teachers commented, "Teachers should be paid based on their work, not just their education level. I would like to see pay for the job done in the classroom, like in the business world, "While pay is not a variable included in this study, it continues to be a concern for educators.

Mentoring professional development programs have been linked to the increasing likelihood that teachers would remain in the profession (Blank, Kershaw, Suter, & Humphrey, 2004**)**. The comments regarding mentoring and intent was indicated by the teachers in this study as well. Teachers indicated the value of mentoring during the first year on the job. The literature also supports the value of mentoring during the first five years in the profession. White (1996) analyzed the effect of the Kentucky Teacher Internship Program on the attrition rate of special education teachers in the state. When the mentor was a special educator, the beginning teacher reported a more successful first year and rated the mentor's influence on their decision to remain in special education as highly significant (Griffin, Winn, & Kilgore, 2003). The comments on the value of mentoring and its impact on the intent to stay did not correlate with the quantitative data presented in the study. The quantitative survey data indicated that the odd of mentoring impacting the outcome of retention was insignificant. What was discovered in this study, is that when a teacher who is mentored stay in the profession more than 5 years, there is a greater likelihood that they remain in the field ten plus years.

When teachers were asked what is the most important reason for the choice you made to leave, teachers indicated a lack of support, retirement and paperwork as indicators for leaving. The response regarding "lack of support" as a reason for leaving correlates with the reason special education teachers stay, support. One teacher commented, "Feeling backed into a corner

without support, and overwhelmed with the demands that now accompany the field in which I

am employed will most likely encourage my decision to leave the profession." Support either

from a colleague or administration is pivotal was for the teachers in this study regarding intent to

remain in the profession. The results of this study are aligned with an investigation completed

by Nickson and Kritsonis (2006) in which factors were identified as contributing to higher

special education teachers' retention.

Retirement as a reason for leaving was an interesting factor that was presented in the

qualitative data of this study. Andrews (2009) reported that of the teachers who leave the

profession annually, 2% generally retire. A special education teachers in this study commented,

"I have made my choice to retire. My mind and body are physically tired; "I am close to

retirement--this May I will complete 29 years in education--I had always hoped to teach beyond

the 30 years required for retirement--that is no longer what I desire to do." The teachers, who

indicated retirement as the reason for leaving, also indicated that they would return as a

substitute or volunteer, because of the relationships. What should be noted is that although the

identified teachers left after 30 years in the profession, they stayed until earning the number of

years needed to retire. Although they indicated that they were dissatisfied when making the

decision to leave, it was apparent that prior years of supportive relationship was the catalyst that

cause them to stay to retirement age as evident in the following comment." "I have made my

choice to retire. My mind and body are physically tired. I accumulated over 200 days of sick

leave so I will be able to retire with at least 30 years of service. I never married or had children.

It was never intended to be that way, but I will say that my life spent in teaching was total

dedication. I would like to have stayed a while longer since I will only be 50 when I retire, but I

have to say that I am discouraged at this point. Maybe I will go back later and work part time or

something. Only time will tell. I will, however, miss the teaching aspect of working with the

kids. That has and will always be the best part of teaching. Until something changes and/or the

top officials start listening to their teachers, I am afraid that the system will lose a lot of good

teachers in due time." These comments by teachers support the study's sociocultural theory

framework, which suggests that relationships are important in a learning community.

While relationships and support can prove to be valuable in a learning community, the lack of

support can be toxic. A teacher in the study made the following comment, "Teachers don't

always leave because they are in a poor school, they leave because they are not supported."

"The value of relationships and support in the learning community as suggested in this study

aligns Street's (2004) research that concludes that a teacher learning to teach is in a highly social

and dynamic space. The social value of a learning community can impact intent to stay in the

profession as seen through the eyes of this teacher in the study, "My school is a place where I

currently have support, although the whole "sped team" may lack it at times, I personally am

surrounded by friends and co-workers that are like family. When general ed is open to change

and the new "Special ed" there is no better place to be." "This is my community and the folks

that will take part in my future." A school community that provides opportunities that resemble

a mentoring relationship can support the resilience and determination of special education

teachers and improve the likelihood of these teachers remaining in the profession.

Through the Lens of the Sociocultural Theory

While GCTS-PSC 2007 survey data did not provide a direct correlation between

mentoring and retention, looking at mentoring from the sociocultural perspective, yields

interesting results from both the quantitative and qualitative data. What was discovered is that

time and opportunity to share and discuss ideas, support, and relationships are important;

whether termed as a factor of job satisfaction or mentoring. This discovery in the current study

correlates with Jurasaite-Harbison and Rex (2010) who indicated that the key to understanding

teacher learning as a sociocultural phenomenon is the assumption that their learning is

constructed through and is visible in the discourse or the way people communicate. Teacher

discourse occurs in macro-context, in organizations and institutions; like departments and

schools and in micro-contexts at a particular time, in a particular place, with particular

participants; like department meetings or a conversation between teachers. This study suggests

that the opportunity for professional conversations and the relationships established by teachers

with their colleagues in their learning community is an important reason they remain in the

profession. A participant in the GCTS-PSC 2007 stated that, "Probably the most valuable

support a new teacher can receive is from another teacher who has "been there." I believe at

least one hour a week should be provided for a new teacher and his/her mentor to meet during

the school day in order for this to happen." Additional responses by special education teachers

included, "I will continue to teach at this school because I am so blessed with colleagues who

demonstrate care, compassion, intelligence, and support--on a regular basis and "I have been

here 14 years and have no desire to go anywhere else. I love the teachers, my students, and my

administration. It is a very nurturing and caring environment. The Special Ed. teachers are

wonderful." According to Illeris (2002), the goal of educational practice is community building

among its members and learning is conceptualized as a growing sense of belonging to this

community. Characteristics of social learning that occurs in participatory systems are elements

such as action, reflection, communication and negotiation. Clearly in this study, teachers

expressed this sense of community and a sense of belonging.

Support is important in a growing and thriving learning community. In a learning

community approach, the learner's identity is formed through participation. The members

become who they are by being able to play a part in the relations of engagement that constitute

the community (Wenger, 1998). What special education teachers said in the study is that support

in the environment they work, provided by a teachers in their similar content area is important

the first year. A teacher indicated, "The mentor should be one from within the department,

especially Special Education" and "I love the school and the people that work there; Family and

support of the staff is very important to me. The willingness for our school to function as a unit

is important to me." The feedback from special education teachers on the GCTS-PSC 2007

correlates with previous studies by Whitaker (2001) and the guidelines for mentoring programs

established by the Council for Exceptional Children. Further, when looking through the

contextual lens of the sociocultural theory, which is not individualized, we discover that

relationships are important; it takes a community/school. The cliché, that people need people

proves true as it relate to special education teacher retention. Teachers indicated they need the

support of others in their learning community. A teacher in the study commented, "Support and

understanding are needed to retain teachers." The support identified by their colleagues and

administration indicated as necessary in the learning environment they work in. Teachers

provided this feedback, "I work with some excellent professional people who make teaching an

enjoyable experience." "This is my community and the folks that will take part in my future.".

The social transactions between new teachers and their more expert mentor teacher are crucial as

newcomers begin to see themselves as members of the learning community. Street (2004) stated, "rather than seek a prescriptive method or program for mentoring new teachers, what may prove helpful is a deeper exploration of the social and cultural learning experience of new teachers." This study aligns with the value of social interactions that foster an environment of support in the learning community. These relationships, which are not necessarily defined as mentoring, are believed to be value in the retention of special education teachers.

Conclusion

The relationship between teacher retention, mentoring, and job satisfaction was considered in the study. Job satisfaction (professional development) identified as, time and opportunity to discuss and share ideas with other teachers, is the only variable that resulted in a statistically significant relationship in regards to the reported intent to remain in the profession. While mentoring was not indicated by special education teachers on the GCTS-PSC 2007 as significant in their intent to remain in the profession, what was discovered is the value of support and relationships which by its nature resembles what might be considered a mentoring structure.

The first conclusion that can be drawn from the study is that mentoring is most effective when it provides opportunities in the learning community for mentors and mentees to meet and share ideas with colleagues in a similar content area. Mentoring as defined by Ingersoll, Richards, and Smith, (2004) is a one-on-one process where an experienced teacher helps guide, advice, and support new teachers. Mentoring has also been classified as a professional development by Blank, Kershaw, Suter, and Humphrey (2004). They concluded that mentoring professional development programs have been linked to the increasing likelihood that teachers would remain in the profession. Therefore, if mentoring is viewed through the sociocultural lens

as a professional development that provides teachers with time and opportunity to meet and discuss ideas, it can be considered significant relative to intent to stay in the profession..

The second conclusion is that relationships and support is the ultimate determining factor regarding intent. The quantitative and the qualitative data revealed that a school environment that fosters community is a necessary component during the first year and beyond to retain teachers. Teachers want formal and structured opportunities to share ideas and receive the support they need to be successful in their classrooms. The teachers in the study indicated fairly strongly that district/system level professional developments do not promote job satisfaction and ultimately impacted their stated intent to remain in the profession. These finding align with the work of Wood and Weasmer (2004), who indicated the value of a learning community that provides the reciprocal exchange of ideas for veteran and new teachers. The reciprocity provides a learning stimulant for both teachers and thereby increases job satisfaction.

The third and finally conclusion that can be drawn is, mentoring and job satisfaction can impact the intent to remain in the profession based on race, gender, and number of years teaching, for special education teachers. The study indicated that whites and females have a greater propensity to remain in teaching. Because of this, other underrepresented groups such as minorities and men should be provided with similar opportunities for relationships which will support them during the important induction period as teachers. This conclusion aligns with Biscay (2009), who reported job satisfaction and motivation correlates significantly with responsibility levels, gender, subject, age, and years of teaching experience. This study found that the odds were more likely that a male teacher or an African American teacher would leave the profession, as well as those teachers who were new to the teaching profession.

Implications

"The pool keeps losing water because no one is paying attention to the leak.... We're misdiagnosing the problem as recruitment, when it's really retention.... We train teachers poorly and then treat them badly-and so they leave in droves" (Merrow, 1999). This assertion will be the reality for school leaders if a re-calibrated focus is not implemented regarding the retention of special education teachers. The retention of special education teachers has been and still is a concern nationally and at the local school level. The inability of school districts to retain highly qualified special education teachers impacts a district financially, but most importantly, also affects the outcomes, supports and services for students with disabilities. Because many special educators do not survive the path from hopeful beginner to highly qualified, experienced teacher, the cost for replenishing the pool as well can impact a school district's budget. The Alliance for Excellent Education (2005), reported that the cost of teachers in Georgia leaving the profession is estimated at more than $81 million per year.

The financial implications as a result of a failure to retain special education teachers can not only impact a district's human resources budget, but allocation of state and federal funds. Therefore, the financial ramification is one the major areas school leaders must be aware of, if they are not able to maintain special education teachers. Because of the financial impact, school districts and site level leaders must take proactive steps to reduce the retention rate. Therefore, it is imperative that school leader look closely at what keep and retains special education teachers. Woods and Weasmer (2002) found that mentoring strategies increase job satisfaction; which aids in the overall retention of teachers. What special education teachers in the GCTS-PSC 2007 indicated was that time and opportunity to discuss ideas with their colleagues was important.

The teachers who participated in the GCTS-PSC 2007 who indicated that they had been a mentor or a mentee, stated that a well-designed structured mentoring program that provided a designated time to meet, is the level of support needed to impact their intent to remain in the profession. Gupta (2008) stated that mentoring is "one of the best interactive systems that mentors, mentees and the educational system can actively participate in. It helps to create a quantitative program to help train new teachers, develop more experienced educators and improve the technique and methods used in instruction." (p. 1). Therefore, I draw the conclusion that the investment of school districts in well-designed mentoring programs, which are site-based, can retain highly qualified teachers and sustain the support and services need to support students with disabilities. In the opinion of this researcher the implications for a district would be to pay now or really pay later, especially when it comes to the loss of state and federal dollars.

The results of this study contributes to the existing literature by providing school leaders with what special education teachers indicate as key factors that impact their intent to remain in the teaching profession. The study did support existing literature that indicates that factors such as paperwork, pay, and retirement are factors that contribute to special education teachers leaving the profession. The major factors this study revealed, is the importance of support and relationship as an indicators that positively impacts special education teachers intent to remain in the profession.

Recommendations

The purpose of this study was to determine whether a relationship exists between mentoring, job satisfaction and the intention of special education teachers to remain in the teaching profession. Specifically, this study looked at pre-existing survey data from over 2,000

special education teachers in the state of Georgia. Based on the results from this data, the researcher recommends the following:

1. Future studies that focus specifically on mentoring program for special education teachers in the State of Georgia to determine if a mentoring program design impacts the intent to stay or leave the profession.

2. A revisit the state designed mentoring program to focuses specifically on special education teachers. The design should be formatted in such a way that districts are responsible for the fidelity to the mentoring model and are encouraged to maintain the structure and goal of the program.

3. Additional studies using the existing data from the GCTS-PSC 2007 to identify those factors that positively impact retention based on race and gender.

4. The development of a comprehensive mentoring program that is geared specifically for males and minorities.

5, The development of school-based programs beyond teacher induction, to increase job satisfaction, that focuses on relationship building and support from teachers in similar content areas.

6. Conduct follow-up interviews using to the existing data from the GCTS-PSC 2007 to further determine to the difference between and among special education and general education teachers their intent to remain in the profession.

<div align="center">**Dissemination**</div>

The partnership between State, District and School leaders is key to developing and implementing program change that will impact the retention of special education teachers.

Therefore, the researcher will disseminate the study to State, District and School-based

stakeholders at conference and district leadership meeting. The researcher will share the findings

of the study with the Coordinator of Professional Development and Director of Human

Resources in the district where the researcher is employed. The researcher will also submit a

conference proposal to present the findings at the Georgia Association of Special Education

Administrators (G-CASE) and the Georgia Educational Research Association (GERA). The

conference attendees for both of these conferences include state and district level personnel who

can impact change at the state and local level.

Concluding Thoughts

As a special education administrator, for several years, I served on the teacher recruiting

team for the district. I chose this topic because of the frustration I felt after observing the major

influx and then subsequent loss of special education teachers yearly in the district where I am

currently employed. As a result of this frustration, I looked at what made the difference for me. I

remained in the profession as a result of the support I received and relationships developed in the

learning community. When I walked in the school they day, I was assigned a mentor in the field

of special education, we participated together in my 101 (orientation classes to the school)

together and we meet regularly during the school day. As a special educator, I know and

understand the value and impact of well-designed mentoring program that builds relationships in

the school community, while providing support on consistent bases. Therefore, my final

thoughts are that is the relationship the teacher builds with fellow teachers, not the organized

concept of a mentor/mentee relationship that is enforced upon them. Structure is important, but

more important is the time to spend with like-minded teachers who offer support and feedback

on consistent bases that impacts a special education teacher's decision to remain in the

profession.

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APPENDIX A

IRB APPROVAL LETTER

Georgia Southern University
Office of Research Services & Sponsored Programs

Institutional Review Board (IRB)

Phone: 912-478-0843		Veazey Hall 2021
		P.O. Box 8005
Fax: 912-478-0719	IRB@GeorgiaSouthern.edu	Statesboro, GA 30460

To: Angela Horrison-Collier
Dr. Kymberly Drawdy

cc: Charles E. Patterson
Vice President for Research and Dean of the Graduate College

From: Office of Research Services and Sponsored Programs
Administrative Support Office for Research Oversight Committees
(IACUC/IBC/IRB)

Date: 12/13/12

Initial Approval Date: 12/13/12

Expiration Date: 07/31/13

Subject: Status of Application for Approval to Utilize Human Subjects in Research

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After a review of your proposed research project numbered **H13181** and titled **"Special Education Teacher Retention: The Relationship Between Mentoring, Job Satisfactin and the Retention of Special Education Teachers,"** it appears that your research involves activities that do not require full approval by the Institutional Review Board according to federal guidelines.

According to the Code of Federal Regulations Title 45 Part 46, your research protocol is determined to be exempt from full review under the following exemption category(s):

B4   Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that your research is exempt from IRB approval. You may proceed with the proposed research.

Please notify the IRB when you have completed the project by emailing irb@georgiasouthern.edu. Include the date of completion, the number of subjects (records) utilized and if there were any unexpected events related to the subjects during the project. (If none, state no unexpected or adverse events occurred during the conduct of the research.)

Sincerely,

Eleanor Haynes
Compliance Officer

APPENDIX B

GEORGIA CERTIFIED TEACHER SURVEY

Would you please provide your last name and ONLY the LAST FOUR numbers of your Social Security number so that we may look up your PSC information? Why? So we can understand, for example, how teachers with your certification think about things compared to teachers with other certifications. And we can ask MANY fewer questions! This is a secure site, but we'd rather be on the safe side and only ask for your SSN last four.

Please provide your last name. Again, you will NEVER be identified with your answers to anyone outside the PSC research office. Thank you!

eads

And the LAST FOUR digits of your Social Security number:

7357

Georgia Teacher Certificate Number

If you did not wish to provide the last four digits of your Social Security number, please give us your Georgia Teacher Certificate number. You can look it up on another secure PSC web page: https://www.gapsc.com/certification/lookup.asp . We will be much better able to understand your answers if you'll let us look up your PSC information. Thank you!

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Section 1. Background

Before we get started, may we have a bit of background information not in your electronic PSC record? It will help us look at some important issues. THANK YOU!

There are many different degrees you might have earned preparing for or during your career. Please mark each kind of degree you have earned.

- ☐ Associate of Arts (A.A.)
- ☐ Bachelor's in Education (B.Ed.)
- ☐ Bachelor of Arts in Education (B.A. in Education)
- ☐ Bachelor of Science in Education (B.S. in Education)
- ☐ Bachelor of Arts (in a content area) (B.A.)
- ☐ Bachelor of Science (in a content area) (B.S.)
- ☐ Master of Arts in Teaching (M.A.T.)
- ☐ Masters in Education (M.Ed.)
- ☐ Master of Arts in Education (M.A. in Education)
- ☐ Master of Science in Education (M.S. in Education)
- ☐ Master of Arts (M.A.)
- ☐ Master of Science (M.S.)
- ☐ Specialist in Education (Ed.S.)
- ☐ All But Dissertation (ABD) status enroute to doctorate
- ☐ Doctorate in Education (Ed.D.) (No dissertation)
- ☐ Doctorate in Education (Ed.D.) (Dissertation required)
- ☐ Doctorate of Philosophy (in Education) (Ph.D.)
- ☐ Doctorate of Philosophy (in a content area) (Ph.D.)
- ☐ Other degree not listed

If you checked "Other degree not listed," please tell us what it is.

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What is the name and location of the high school from which you graduated? If you would, please spell out the name rather than use just the initials.

From what college or university did you earn your Bachelor's degree(s)? If you have several, please list them all. Again, please spell out the name - - GSU, for example, could be either Georgia State or Georgia Southern. THANKS!

If you have earned one or more advanced degrees, when and from where was your most recent degree awarded? (Don't forget to spell out the name - -) Which degree?

In total, how many years have you taught PreKindergarten - Grade 12 (P-12)? (We can only look up your Georgia public school years. Please tell us the total years you've taught in all states including Georgia in both public and private schools.)

In what year did you first start teaching P-12? (Some teachers leave for different reasons and then return to teaching.)

In what kind of area were you raised? If you grew up in several places, please choose the one you think influenced you most growing up. Next, in what kind of area do you now teach? Finally, in what kind of area would you like to teach? (NOTE: This question asks for an answer in each column rather than in each row.)

	Where you grew up.	Where you now teach.	Where you would like to teach.
Rural area (not in a town or city)	○	○	○
Small town (under 25,000)	○	○	○
Large town (25,000 - 74,999)	○	○	○
Suburban area (outside a city)	○	○	○
Small city (75,000 - 300,000)	○	○	○
Large city (over 300,000)	○	○	○

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Section II: In your own words

Please tell us what first comes to mind about what you like most and least about teaching, and what most needs to be changed. You're welcome to come back to change your answers if you wish, but we'd really like to hear what comes to mind first. Type as little or as much as you'd like. There will be an ample number of "pick an answer" questions asking how you feel about the issues that affect your teaching, what we'd like to know here is what's on the top of your lists!

What do you like most about teaching?

What do you like least about teaching?

What would you most like to see changed about teaching?

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How were you initially prepared for your teaching career?

- ○ College or university teacher education (You received your certification upon completion of your Bachelor's degree)
- ○ College or university post-graduate teacher education (You received your certification after returning to college to complete a series of post-graduate courses)
- ◉ Alternative preparation program – college or university (You received your certification after completion of a program such as the Georgia TAPP, taking a series of college courses)
- ○ Alternative preparation program – RESA or school system (You received your certification after taking classes and receiving supervision by RESA and school system staff)
- ○ Alternative preparation program – Combination (You received your certification after taking classes and receiving supervision from university faculty as well as RESA and school system staff)
- ○ Other route not listed

How well do you think the above experience prepared you for your first several years teaching?

- ○ Extremely well prepared
- ○ Very well prepared
- ○ Somewhat well prepared
- ○ Not very well prepared
- ○ Poorly prepared
- ○ Virtually unprepared

If you would, please explain your answer.

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Section III: Mentoring: When you first began teaching, were you provided mentoring or an induction program ?

- ◉ Yes
- ○ No

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Please tell us about the induction/mentoring program you had as a new teacher

About how many hours a week, on average, was your induction program?

About how many weeks long was your induction program?

About how many hours a week, on average, did you spend with a mentor?

About how many weeks did you work with your mentor at least once a week?

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How would you rate your new teacher induction or mentoring program? If one of the items doesn't apply, just mark "Not applicable" (NA).

	Extremely helpful.	Somewhat helpful.	Slightly helpful.	Not helpful.	NA
Your beginning orientation to your school and the classroom	○	○	○	○	○
Support from your principal and/or assistant principal(s)	○	○	○	○	○
Support from your department chair	○	○	○	○	○
Your induction program's training/professional learning	○	○	○	○	○
The mentoring provided to you by an experienced teacher	○	○	○	○	○

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When you first began teaching, how much do you think a mentoring or induction program would have helped you?

○ It would have been invaluable
○ It would have been very helpful
○ It would have been somewhat helpful
○ It might have helped some
○ It wouldn't have made any difference

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How helpful do you think your mentoring or training was to a new teacher?

- ○ Extremely helpful
- ○ Somewhat helpful
- ○ Slightly helpful
- ○ Not very helpful

How do you think the induction or mentoring program(s) you helped with could be improved?

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Section IV: Reasons you like or dislike teaching

On the next several pages are lists of things teachers have said affect how they feel about teaching. Please rate how you feel PERSONALLY about each of these aspects of YOUR CURRENT teaching situation. Mark what you think about each aspect of your work, using:

"One of Best" for "This is ONE OF THE BEST things about my work."

"Good" for "This is a PRETTY GOOD thing about my work."

"Okay" for "This is an OKAY thing about my work. Could be worse, could be better, but I can live with it."

"Bad" for "This is a PRETTY BAD thing about my work."

"One of Worst" for "This is ONE OF THE WORST things about my work. I REALLY dislike this."

You may mark an item "Not Applicable" (NA) if it doesn't apply to your situation. THANK YOU!

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Reasons for Teaching: Personal and professional

What do you think about these personal and professional aspects of your current teaching position?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Job security	○	○	○	○	○	○
Professional prestige	○	○	○	○	○	○
Intellectual challenge	○	○	○	○	○	○
Professional caliber of your colleagues	○	○	○	○	○	○
Acceptance by your colleagues	○	○	○	○	○	○
Friendships with your colleagues	○	○	○	○	○	○
Support from your teacher organization	○	○	○	○	○	○
Support from other professional affiliations	○	○	○	○	○	○
Support from personal friendships	○	○	○	○	○	○

Are there one or more organizations, associations, affiliations or other networks that help you stay in teaching? What are they? How do they help you? Please write as little or as much as you'd like.

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Reasons for Teaching: Compensation

What do you think about these aspects of your compensation?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Base state salary	○	○	○	○	○	○
Salary increases for experience	○	○	○	○	○	○
Salary increases for advanced degrees	○	○	○	○	○	○
Cost of living salary increases	○	○	○	○	○	○
Opportunities for advancement	○	○	○	○	○	○

In your current position, are any of the following compensation components available to you?

	Yes.	No.	Not Sure
Health care benefits	○	○	○
Retirement benefits	○	○	○
Local salary supplement	○	○	○
Income from stipends, additional duties or summer school	○	○	○
Pay or other incentives for excellent teaching (e.g., pay for performance)	○	○	○
Pay or other incentives for teaching in a high-need subject or school	○	○	○

If you DO have any of these compensations available to you, what do you think of them? If an item is not available, you may check "NA" or simply leave it blank.

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Health care benefits	○	○	○	○	○	○
Retirement benefits	○	○	○	○	○	○
Local salary supplement	○	○	○	○	○	○
Income from stipends, additional duties, summer school	○	○	○	○	○	○
Pay or other incentives for teaching excellence	○	○	○	○	○	○
Pay or other incentives for teaching in a high-need subject or school	○	○	○	○	○	○

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Reasons for Teaching: The Job

What do you think about these classroom and instructional aspects of your current teaching position?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Your teaching load	○	○	○	○	○	○
The size of your classes	○	○	○	○	○	○
Autonomy and control over your own classroom	○	○	○	○	○	○
Your daily teaching schedule	○	○	○	○	○	○
Time off from teaching during the summer	○	○	○	○	○	○
The opportunity to help others learn	○	○	○	○	○	○
The opportunity to work in your discipline or specialty	○	○	○	○	○	○
Teaching in-field (as opposed to having to teach out-of-field)	○	○	○	○	○	○
Time to teach what you're told must be taught	○	○	○	○	○	○
Time to teach what you believe should be taught	○	○	○	○	○	○
Time for assigned non-instructional duties	○	○	○	○	○	○
Explanation of assigned duties so you can do them well	○	○	○	○	○	○
Time to complete required paperwork	○	○	○	○	○	○
Adequacy of preparation/planning time	○	○	○	○	○	○
Student motivation to learn	○	○	○	○	○	○
Student discipline and behavior	○	○	○	○	○	○
Help with inclusion of special education students	○	○	○	○	○	○
Number of students in your classes needing special education	○	○	○	○	○	○
Number of students in your classes needing extra reading help	○	○	○	○	○	○

About how many hours a week, on average, do you spend on everything related to your job? We mean everything: Teaching, grading, sponsoring clubs, calling parents, attending school events and before and after school meetings, coaching, you name it.

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Reasons for Teaching: Resources

What do you think about these resources for your current teaching position?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
The number of textbooks (Are there enough?)	O	O	O	O	O	O
The quality of the textbooks (Are they well written and accurate?)	O	O	O	O	O	O
The currency of the textbooks (Are they up to date?)	O	O	O	O	O	O
Capability of the technology for your classroom (Is it powerful and fast enough?)	O	O	O	O	O	O
Concentration of the technology for your classroom (Is there enough of it?)	O	O	O	O	O	O
Reliability of the technology for your classroom (Does it work almost all the time?)	O	O	O	O	O	O
Availability of supplies, materials and equipment for your classroom	O	O	O	O	O	O
Availability of functioning copy equipment for your needs	O	O	O	O	O	O
Library/media center resources	O	O	O	O	O	O
Spending your own money on supplies	O	O	O	O	O	O

Speaking of spending your own money, about how much did you spend last year for classroom supplies?

$ [   ]

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And speaking of spending your own money, how much did this year's Teacher Supplies Gift Card provided by the state help you?

O Helped a great deal
O Helped some
O Helped slightly
O Didn't really help
O Didn't use it
O Didn't get it

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Why didn't you or weren't you able to use the Gift Card?

Reasons for Teaching: Leadership and management

What do you think about your local and state leadership?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Recognition for good teaching	○	○	○	○	○	○
Fairness of your teaching evaluations	○	○	○	○	○	○
Support teachers get from your building leadership	○	○	○	○	○	○
Support your school gets from the central office	○	○	○	○	○	○
Support your school gets from the RESA	○	○	○	○	○	○
Support your school gets from the state	○	○	○	○	○	○
Competence of your building leadership	○	○	○	○	○	○
Competence of your central office leadership	○	○	○	○	○	○
Your ability to influence your school's policies and practices	○	○	○	○	○	○
Rules and policies from your building leadership	○	○	○	○	○	○
Rules and policies from your central office	○	○	○	○	○	○
Rules and policies from the state	○	○	○	○	○	○
Quality of the old Quality Core Curriculum	○	○	○	○	○	○
Quality of the new Georgia Performance Standards	○	○	○	○	○	○

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Reasons for Teaching: Professional learning

What do you think about the professional learning opportunities at your current school?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Opportunity for system- or school-sponsored professional learning	○	○	○	○	○	○
Opportunity to be part of a learning community or study group	○	○	○	○	○	○
Opportunity for job-embedded professional learning	○	○	○	○	○	○
Opportunity for common planning time	○	○	○	○	○	○
Quality of system and school professional learning	○	○	○	○	○	○
Opportunity for state-sponsored professional learning	○	○	○	○	○	○
Quality of state-sponsored professional learning	○	○	○	○	○	○
Release time to attend workshops or professional meetings outside school	○	○	○	○	○	○
Resources to attend workshops or professional meetings outside school	○	○	○	○	○	○
Training in the use of technology	○	○	○	○	○	○
Training in classroom management	○	○	○	○	○	○
Time and opportunity to discuss ideas and issues with other teachers	○	○	○	○	○	○

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Reasons for Teaching: External factors

What do you think about these "external" aspects of your current teaching position?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Quality of locally required student testing	○	○	○	○	○	○
Quality of state required testing (e.g., CRCT, EOCT)	○	○	○	○	○	○
Amount of locally required testing	○	○	○	○	○	○
Amount of state required testing	○	○	○	○	○	○
Amount of time you spend preparing students for tests	○	○	○	○	○	○
Paperwork you have to do	○	○	○	○	○	○
Effects of the No Child Left Behind (NCLB) Act on students	○	○	○	○	○	○
Effects of the No Child Left Behind Act on teachers	○	○	○	○	○	○

Reasons for Teaching: Community

What do you think about these aspects of your community?

	One of Best.	Good.	Okay.	Bad.	One of Worst.	NA
Support for your school from the community	○	○	○	○	○	○
Support for your school from businesses	○	○	○	○	○	○
Parent support of their child's education	○	○	○	○	○	○
Parent support for your teaching	○	○	○	○	○	○
Parent support for your classroom management	○	○	○	○	○	○
Involvement of parents at your school	○	○	○	○	○	○
Involvement of parents in your classroom	○	○	○	○	○	○

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Section V: In this last section, now that you've pondered all those issues, what does it all come down to? Type as little or as much as you'd like. There's a place for you to tell us what we missed, too.

What do you think is absolutely the most important thing that could or should be done to help teachers stay in teaching?

Of perhaps many reasons, what is the single most important one that would – or will – make you leave teaching?

Looking back over your career, was there a particular event or experience that most helped you decide to continue teaching? If so, what was it? How many years had you taught when this occurred?

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In the final analysis, what do you think you will do?

- ○ Continue to teach at this school.
- ○ Continue to teach but at another school.
- ○ Leave the classroom for administration.
- ○ Leave the classroom for student services.
- ○ Leave the teaching profession altogether.
- ○ I honestly don't know.

We apologize if it's redundant to what you've told us earlier, but what is the most important reason for the choice you made here?

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And, at long last, what's still on your mind that we didn't give you a chance to say?

That's it! Thank you so very much for sharing both your time and your feelings about teaching. We'll do everything we can to make sure your effort here makes a difference for you and your colleagues. Best wishes to you for a great year and a successful career.

If you have thoughts about the interview, or think of something you'd like to add, please send us a note at PSCSurvey@gapsc.com. We look forward to hearing from you!

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End of interview. Thank you for your participation.