

NON-PECUNIARY FACTORS IMPACTING THE RETENTION OF NEW TEACHERS AT  
THE SECONDARY LEVEL IN ONE VIRGINIA SCHOOL DIVISION

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**Abstract**

The purpose of this study was to measure the influence of teacher preparation experiences, collegial support, and principal support on new teachers' decisions to remain in the teaching profession. Quantitative research was conducted using data from an electronic survey to examine the impact the three predictor variables had on the likelihood of a new teacher remaining in the profession beyond five years. Research explored the precipitating theory based on scholarly literature, that teachers who are well prepared with practical experiences, and who feel supported and valued by their colleagues and principals, reflect the highest level of job satisfaction and potential to remain in the teaching profession.

Five findings emerged from this study. Two findings indicated that collegial support and principal support, both had a statistically significant influence on new teacher retention. In addition, the study found that nearly 75% of new teachers showed some level of job satisfaction with the teaching profession.

Participants in the survey included one hundred and eighty-four teachers with 0-5 years' experience, representing teachers from 21 secondary schools within one school district. Participants were asked to respond to questions based on their personal experiences and feelings related to the teaching profession and their overall satisfaction level.

### **Dedication**

I dedicate my dissertation and the success of this journey to my mom, the strongest and bravest person I know. Mom, it is impossible to put into words how much your support, wisdom, and unconditional love mean to me. I hope my life will always be a reflection of you and the many gifts you unselfishly share with all who know you. I appreciate and thank God that his plan included you as my mother. Thank you, mom! This dedication is also made in memory of my dad. His greatest joy was celebrating the successes of his children and grandchildren. Dad, you are missed every day.

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*"It always seems impossible  
until it is done"*

Nelson Mandela

## **Chapter 1**

### **Introduction**

In 1983 President Reagan unveiled the national report, *A Nation at Risk*, which issued warnings of teacher shortages in the areas of mathematics, earth sciences, and physics (National Commission on Excellence in Education [NCEE], 1983). In 2003, Murphy and DeArmond reported that the concern targeting the nation's inadequate supply of teachers at the elementary and secondary levels had found its way to the top of the education policy agenda. "Warnings about a national teacher shortage loomed in the headlines, raising serious questions about whether or not schools and districts could fully staff their classrooms" (p. 1). Over the last decade, the concern continued to intensify due to the predicted large exodus of teachers from the Baby Boomer generation (Murphy & DeArmond, 2003). A 2007 study from the National Commission on Teaching and America's Future (NCTAF) found the population of Baby Boomer teachers, nearly 1.8 million, accounted for 54% of all teachers. The study revealed the average retirement age for teachers as 59, but also noted that teachers often enter retirement at age 56 or sooner. Based on data from the study, "We [the United States] can expect to lose as many as 1.5 million veteran teachers due to retirement during the next eight years" (p.3). The solution to replacing the aging generation of teachers is hiring new teachers who are innovative and ready to face the challenges of a new global society, and who will expectantly experience the same career longevity as the Baby Boomer generation. However, the solution has not proven to be quite that simple. According to Darling-Hammond & Sykes (2003) and Ingersoll (2003), an estimated 40-50% of new teachers leave the classroom within the first five years of their career; this includes the 9.5% who leave the classroom before the end of their first year. The exit rate is even higher in disadvantaged districts, which makes the prospects of finding and retaining well qualified and committed teachers an ongoing challenge for many school districts (Darling-Hammond & Sykes, 2003; Ingersoll, 2003; and Ingersoll, 2012).

Given that a large number of teachers retire each year, continued attention and concern surrounding new teacher attrition, defined as those who leave teaching altogether (Ingersoll & Smith, 2003), looms in the minds of school administrators. School systems in the United States have experienced a steady increase in new teacher attrition since 1994 (Carroll & Foster, 2004). According to the 2011 MetLife survey of American teachers, 26% of teachers with five years or less experience are likely to leave the profession in the next five years. “Policymakers, educational administrators, and the public at large all understand the quality of the teaching force is essential to improving student achievement, and research supports this common sense notion” (Iiu, Rosenstein, Swan, & Khailil, 2008, p. 296). Of the teachers participating in the 2009 Schools and Staffing Survey (SASS), approximately 28% of first year teachers indicated that they already plan to leave teaching entirely or move to another school. In addition, 26% percent of second year teachers, 22% of third year teachers, and 22% of fourth year teachers, all expressed the same intention. This perpetual turnover rate of new teachers leaving the profession creates a revolving door effect, making it difficult for school districts to retain teachers long enough for them to acquire the skills and longevity of classroom experience necessary to meet student needs. This high turnover rate is especially problematic for schools located in disadvantaged areas (Ingersoll, 2003). In addition to teacher turnover, the Bureau of Labor Statistics (2011) predicts a 13% increase in employment, based on population, for elementary, middle and secondary teachers between 2008 and 2018 resulting in an increase of new hires needed to fill teaching positions. Ingersoll and May (2012) found in their review of data from the National Center for Education Statistics (NCES), that the turnover rate for math teachers increased 34% from the late 1980s to 2005. Math and science were the first curriculum areas identified in the shortage warnings (NCEE, 1983), but the concern subsequently spread to all fields of study (Fowler, 2009; Nichols, Bicard, Bicard, & Casey, 2008; Van Houten, 2009). Administrators agree the supply of qualified teachers is tight, demand is high, and the struggle to hire the best candidates is competitive (Iiu et al., 2008). The need for qualified and experienced teachers is evident; the problem is how to retain such teachers beyond the first five years of their career. Supporting and retaining new teachers, who account for approximately 26% of the teaching population, (Feistritz, 2011), is essential in increasing the number of qualified teachers in the classroom.

In 2008, 25% of the teaching profession was made up of teachers with five or less years' experience. Recognizing that 26% of the teaching force is the same group that has a 40-50% exit rate magnifies the concern regarding new teacher turnover (Ingersoll, 2012). As the demand for qualified teachers continues, and new teachers are needed to fill vacated positions, it is vital for school leaders to understand the traits and expectations of a new generation of teachers preparing to enter the profession (Coopersmith, 2009). Who are these new teachers, what makes them different from their veteran counterparts, and what are their perceptions about education? Generation Y (GenY), as defined by the *Oxford Dictionary*, refers to the generation born during the 1980s and 1990s comprised primarily of the children of Baby Boomers. Gen Y represents nearly one-fifth of the total teaching population (Coopersmith, 2009). The 26% of teachers with 1-5 years' experience would include members of Gen Y, those born in the mid 1990's or earlier if the teacher is a career switcher. While research is available on a myriad of factors that influence new teacher attrition, more research that examines the characteristics and life experiences of new teachers is needed. New teachers themselves are the individuals who can best provide insight into the new generation of teachers and how they view education (Ingersoll, 2003).

Carroll and Foster (2004) concisely summed up the impact of the teacher shortage by stating, "In addition to hemorrhaging teaching talent at the beginning of the career, we [United States] are about to lose accomplished teaching talent at the veteran end of the career on an unprecedented scale. The career pipeline is collapsing at both ends" (p. 4). This is a pivotal time for school leaders to examine factors that contribute to new teacher retention, or more importantly, identify the factors that have the greatest influence on a new teacher's decision to remain in the teaching profession. School districts have relied on the experience and expertise of veterans for many generations. As the final round of Baby Boomers retire over the next few years, a new generation of experienced teachers are needed to replace them. Once new teachers are hired, the focus must shift to retention beyond the first five years in the classroom.

### **Overview of the Study**

This study examined the influence of teacher preparation experiences, collegial support, and principal support on teacher satisfaction as a determinant of retention. The study was modeled after Peck's (2002) study, *A High School Principal's Challenge Toward Work*

*Environments that Enhance New Teacher Satisfaction and Retention*. Peck's study served as a strong model for this research in that it also sought to find relationships between job-related factors and new teacher retention. It is important to note, that current research found in the literature review, continues to indicate that in the 12 years since Peck's study, new teacher retention remains a concern for school districts nationwide. The education profession is ever evolving, and factors that influence teacher satisfaction are affected. Since Peck's study, the No Child Left Behind Act (NCLB) Act of 2001 has been fully implemented, modified, and revised with each President's administration to include state required standardized testing and teacher evaluation programs. This study addressed the possibility that additional pressure associated with school accreditation and teacher evaluation programs, based on student achievement, may significantly influence a teacher's overall satisfaction with the profession.

Like Peck's study, the research context for this study was overall job satisfaction as a determinant of retention. Teachers who are satisfied in their jobs are more likely to remain in the teaching profession (Halstead, 2013; Henke, Choy, Chen, Gels, & Alt, 1997; Peck, 2002; Weiqi, 2007). The primary difference in this study was the number of influencing factors. Based on new teacher retention research, Peck examined the influence of 7 factors. This study explored the level of influence three non-pecuniary factors that could be managed and improved upon at school and university levels, had on the likelihood of retention. All three factors were also included in Peck's study. The factors listed below served as independent variables for the research study, and new teacher satisfaction as a determinant of retention, was the dependent variable.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

Additional investigative analyses examined age, gender, and career switcher status as covariates to determine if alone or combined, they contributed to better predictions of new teacher retention.

## **Statement of Purpose**

The purpose of this study was to explore the level of influence the factors below had on new teacher retention.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

By exploring and identifying influential factors, school leaders will be more informed and better equipped to support beginning teachers during their first years in the profession. Many studies to date have focused on mentoring programs; this research, however, targeted teacher preparation experiences before obtaining a first teaching position, collegial support beyond mentoring programs, and principal support for the purpose of retaining new teachers. The results could be used to help school leaders develop a more thorough understanding of the supports essential for a new generation of teachers to successfully contribute to a learning community, while also facilitating higher teacher retention.

## **Significance and Justification of the Study**

An estimated 40-50% of new teachers leave the classroom within the first five years in the profession (Darling-Hammond & Sykes, 2003; Ingersoll, 2003). New teacher attrition results in costs of approximately \$7 billion a year to hire and train new teachers (NCTAF, 2007). Funding that could be used for other instructional resources is tied annually to turnover that is repeated at the conclusion of each school year. The financial burden of new teacher turnover is only one concern of this continuing trend; the greater loss is to students who need qualified and experienced teachers to reach their full academic potential. Clodfelter, Ladd, and Vigdor (2007) found in their longitudinal analysis of teacher credentials and student achievement, “clear evidence that teachers with more experience were more effective in raising student achievement than those with less experience” (p. 676).

Teachers with 1-5 years of experience represent approximately 26% of the teaching profession (Feistritz, 2011). These new teachers differ from veteran teachers in life experiences and expectations. As school districts strive to meet the ever-changing educational needs of students, it is equally important to recognize and understand the mindset of this new generation

of teachers, the Gen Y members, currently entering the profession. Coggshall, Berhstock, & Lasagna (2009), in their analysis of the *American Institutes for Research Study* on retaining teachers, characterized Gen Y teachers as “creative, highly educated, innovative, self-confident, and educationally minded” (p.1). They also found that Gen Y teachers:

- (a) are dissatisfied with workplaces that are technologically inferior.
- (b) have a strong moral drive to make a difference in society.
- (c) are accustomed to positive reinforcement, desire constant feedback, and want to be rewarded when they do something well.
- (d) do not see any career as a lifelong pursuit (p. 1).

Gen Y teachers were also described as natural collaborators who are comfortable working in teams to strategize and plan; they have been networking in the virtual world for most of their lives (Coggshall et al., 2009). They view collaboration and planning as purposeful, “Gen Y teachers recognize the difference between meaningful collaboration and ancillary committee work” (Coley 2009, p 21). The understanding of how to blend multi-generations into a collaborative workplace and how to attract members of Gen Y into the profession is not isolated to education. Leaders in the healthcare field are facing the same challenges. Healthcare organizations study generational issues in hopes of attracting enough Gen Y professionals in order to adequately replace the millions of Baby Boomers in healthcare who will retire over the next few years (Cahill & Sedrak, 2012). Nagy (2012) describes our society in one word, change. “We are in a continuous alteration” (p. 1). By recognizing, (a) the difference between Gen Y teachers and veteran teachers; (b) the needs and expectations of Gen Y teachers; and (c) the collegial support necessary during the first years in the classroom, school divisions should stand a better chance of attracting and retaining new professionals.

### **Research Questions**

Teacher satisfaction as a determinant of retention served as the criterion for this study. Three research questions explored new teachers’ perceptions regarding the level of influence the three non-pecuniary factors listed below have on new teacher retention.

- 1) Are there differences in new teacher retention based on teacher preparation experiences?

- 2) Are there differences in new teacher retention based on collegial support?
- 3) Are there differences in new teacher retention based on principal support?

### **Theoretical Framework**

Concerns regarding teacher shortages have existed in the United States for decades, making national headlines with the 1980s report, *A Nation at Risk*, that issued teacher shortage warnings in the areas of math and science (NCEE, 1983). New concerns arose with the predicted large exodus of teachers from the Baby Boomer generation due to retirement. Likewise, research from the 2010 National Commission on Teaching and America's Future projected that from 2010-2018, the U.S. would lose over 1.5 million teachers to retirement (Carroll & Foster, 2004). The loss of experienced veteran teachers accounts for only a portion of teacher shortage concern (Ingersoll, 2003). Sharing the spotlight is new teacher attrition. Data support the problematic issue of teacher attrition during the first five years in the profession including the steady increase in new teacher attrition since 1994 (Carroll & Foster 2004; Darling-Hammond & Skyes, 2003; Ingersoll & May, 2012; Ingersoll & Smith, 2003; Ingersoll, 2003).

Ingersoll's analysis of the Schools Staffing Survey and the Teacher Follow-up Survey (2003) conducted by the National Center for Education Statistics showed that school staffing problems are not primarily due to teacher shortages, in the sense of an insufficient supply of qualified teachers. Rather, the data indicate that school staffing problems are primarily due to a revolving door-where large numbers of qualified teachers depart their jobs for reasons other than retirement (p. 1).

New teachers leave education or request transfers to different schools at an alarming rate and for a myriad of reasons including lack of pedagogical training and practical experiences, the feeling of isolation in the classroom, unexpected high levels of stress, challenging and difficult classes, negative relationships with colleagues, lack of support from building administrators, and the desire to teach at less challenging schools (Anhorn, 2008; Castro, Kelly & Shih, 2010; Darling-Hammond & Skyes, 2003; Ingersoll, 2012; Ingersoll, Merrill, and May, 2012).

Given the fact that the U.S. is losing teachers at both ends of the professional spectrum, and that new teacher attrition has grown by 50% over the last 15 years (NCTAF, 2007), research is needed to better understand why new teachers are dissatisfied with the teaching profession or



with their current school assignment. Recruiting and retaining new teachers may offer more diverse challenges for administrators compared to challenges encountered when the Baby Boomers were hired decades ago.

“Investing in Gen Y talent is riskier for a school or district than investing in talent from previous generations because Gen Y members are less oriented to long-term careers and less loyal to employers who do not help them meet their professional aspirations” (Behrstock-Sherratt & Coggshall, 2010, p. 32). Gen Y teachers are entering the profession with different expectations than those of the Baby Boomer generation. “Theories that formed the basis for training teachers are no longer relevant and themes that were germane to leadership preparation are no longer applicable” (Smith & Addison, 2013, p.1). Turnover is already a concern with this generation. They are life learners and expect colleagues to be interested in their ideas. Gen Y members are used to multitasking in a fast-paced, technology-based environment. If they see a better, more interesting opportunity, even as a lateral move, they will be likely to leave their current position (Cahill & Sedrak, 2012).

New teachers, most of whom represent Gen Y, expect certain benefits from school leaders. They want to know how they are doing, they want this feedback regularly, and they want it in real time. Not only do they want face time with their supervisor, they expect it (Coley, 2009). After more than a decade into the 21<sup>st</sup> Century, schools leaders require an understanding of Gen Y teachers, and their perceptions about the profession (Coley, 2009). Gen Y teachers themselves can provide valuable insight on identifying specific types of support and practical experiences needed at the school level and during the preparatory period to be successful beyond the first years in the classroom.

This study explored the theory that new teachers, who are well prepared through practical experiences, will experience overall job satisfaction when fully supported by colleagues and their principal. These new teachers will develop the practical skills necessary to successfully complete the first year of teaching and continue to grow into seasoned veterans with the intent to remain in the teaching profession. The results of this study were expected to find that new teachers who are well prepared with practical experiences and who feel supported and valued by their colleagues and principals, will reflect the highest job satisfaction and potential to remain in the teaching profession.

## Definition of Terms

Attrition: Teachers intending to transfer to different schools or who plan to exit the teaching profession (Peck, 2002). For the purpose of this study, attrition is will be focus on teachers with 1-5 years' experience.

Baby Boomers: A name given to individuals born between 1944 and 1964 (Carroll & Foster, 2004).

Career Switcher: "Individuals from various occupational and life experiences" (Regent University School of Education, n.d., para 1).

Generation Y: "The generation born in the 1980s and 1990s, comprised primarily of the children of the baby boomers and typically perceived as increasingly familiar with digital and electronic technology" (Oxford, 2014, para 1).

Highly Qualified Teacher: To be deemed highly qualified, teachers must have: 1) a bachelor's degree, 2) full state certification or licensure, and 3) prove that they know each subject they teach (United States Department of Education [USDOE], 2004).

Mentoring: One-on-one assistance and support given by an experienced professional to a novice (American Association of State Colleges and Universities [AASCU], 2006).

Pedagogy: "The method and practice of teaching, especially as an academic subject or theoretical concept" (Oxford, 2014, para 1).

Retention: New teachers intending to remain in the same teaching assignment and at the same school (Peck, 2002).

Secondary Teachers: Teachers who teach in middle, junior, and high schools that include any combination of grades 6-12.

Turnover: "The departure of teachers from their teaching jobs" (Ingersoll, 2001, p. 503).

## Limitations of the Study

The study was conducted under the following limitations:

1. History: "History refers to the extraneous incidents or events affecting the results that occur during the research" (McMillan & Schumacher, 2006, p. 136). A cross-sectional survey was utilized to collect data and responses may reflect emotions and/or attitudes resulting from specific circumstances at the time the survey was

- administered. Engel and Schutt (2009) describe a cross-sectional survey as a method to collect data that reflects one point in time, but not what came before or after.
2. Subject effects: Because participants were asked questions specifically relating to the schools where they were employed, their colleagues, and their principal, they may have felt the need to respond in a more favorable manner. Although the survey was confidential, participants may not have answered honestly in fear of being identified.
  3. Selection: This study utilized a non-random, quota sampling strategy. Participation was voluntary, therefore, teachers who elected to participate may have chosen to do so based on stronger positive, or more negative feelings about the subject matter than those who elected not to participate.

### **Delimitations**

The study was conducted under the following delimitations:

1. Data was collected from one suburban school district in central Virginia and results may only be applicable to districts with similar demographics. The results of this study may not be indicative of results from a school district with differing demographics.
2. Because this study was limited to secondary teachers, results may not be predictive of elementary teachers. Inferential data is used “to make predictions about similarity of a sample from which the sample is drawn” (McMillian & Schumacher, 2006, p. 150).
3. The study did not measure actual retention, respondents were asked to gauge their likelihood of remaining in the teaching profession, and their likelihood of remaining at their current school. Therefore, like Peck’s (2002) study, retention is defined as a new teacher intending to remain the teaching profession or intending to remain in the schools where he or she is currently assigned.
4. Teachers were not afforded the opportunity to provide open-ended responses to questions which according to Babbie (2012), may have resulted in the omission of issues the teachers’ may feel are important factors.

## **Organization of the Study**

This study is divided into five chapters. Chapter 1 begins with the introduction and includes: (a) overview of the study, (b) statement of the purpose, (c) significance and justification of the study, (d) theoretical framework, (e) definition of terms, (f) limitations of the study, (g) delimitations of the study, and (h) organization of the study.

Chapter 2, the literature review, provides historical and current evidence supporting the growing concern about new teacher attrition. It is divided into seven sections including: (a) background information (b) modeling a previous study, (c) chapter outline, (d) satisfaction as determinant of retention, (e) teacher preparation experiences, (f) collegial support, (g) principal support, and (h) chapter summary.

Chapter 3 provides an overview of the study. The research method is identified including: (a) research design, (b) data collection and time frame, (c) research questions, (d) instrument design, (e) instrument validation, (f) population, (g) site related benefits, (h) descriptive statistics, (i) data analysis, (j) data treatment and confidentiality, and (k) summary.

Chapter 4 presents the results of the research study and is divided into the following sections: (a) demographic findings (b) reliability of the questionnaire constructs, (c) descriptive analysis, (d) ANOVA, (e) extension of analysis (ANCOVA), (f) multiple regression, and (g) summary.

Chapter 5 provides a summary of the findings and conclusions based on the results found in Chapter 4. The chapter is divided into four sections including: (a) summary of findings, (b) implications for practice, (c) suggestions for further study, and (d) researcher's reflections.

## **Chapter 2**

### **Review of Literature**

The article review process for this study began by conducting a *Summon* search through the Virginia Polytechnic University Libraries databases, using the following search criteria: retaining new teachers, teacher shortages, teacher satisfaction as it relates to retention, and factors that impact teacher retention. Additional searches sought to find studies linking new teacher preparation, collegial support, and principal support to new teacher retention, and to find identifying characteristics and expectations of a new generation of teachers. No search limits were used at the onset of the study, but the date range of 2010 to the present was used later in the research process.

#### **Background Information**

Teaching is one of the largest occupations in the United States, representing 4% of the civilian workforce. There are more than twice as many K–12 teachers as registered nurses and five times as many teachers as either lawyers or professors (Ingersoll, 2003; Ingersoll & Smith, 2003; Ingersoll & May, 2012). It is widely acknowledged that teacher attrition, for those with 1-5 years' experience, has been, and continues to be a nationwide concern (Ingersoll, 2003; Ingersoll, 2012). It is estimated that approximately 200,000 new teachers are needed annually and about half of those hired will be new teachers with no experience (Darling-Hammond, 1997). With an estimated 40-50% of new teachers leaving within the first five years and even higher exit rates in disadvantaged districts, the ability to find quality and committed teachers continues to be a challenge (Darling-Hammond & Sykes, 2003; Ingersoll, 2003; and Ingersoll, 2012). The repeated cycle of losing beginning teachers creates increased hiring pressures for school divisions. As the demand for teachers continues to grow, the trend of leaving the profession within the first five years must be explored.

The No Child Left Behind Act of 2001 (NCLB) required all teachers be highly qualified by the 2005-2006 school year. To be highly qualified, teachers must have: (a) a bachelor's degree, (b) certification or licensure to teach in the state of his or her employment, and (c) demonstrated competency in the subjects they teach (USDOE, 2004). NCLB created a hiring dilemma for all schools but, the challenges were far more problematic for disadvantaged school districts that were often forced to rely solely on new teachers to fill vacant positions (Darling-

Hammond, 2003; Darling-Hammond & Sykes, 2003). Teacher attrition during the first five years has been a long-standing problem in the United States. When the number of teachers who leave the profession entirely is combined with the number of teachers who transfer from one school to another, the turnover rate is 50% higher in high-poverty schools when compared to schools in higher socio economic communities (Darling-Hammond & Sykes, 2003). In the last twenty years, new teachers accounted for a larger number of classroom teachers than veteran teachers. In 1988 the most common teacher had 15 years teaching experience. In contrast, by 2008, 25% of the teaching profession was made up of teachers with five or fewer years' experience.

Figure 1 shows a comparison of years of teaching experience in 1987-88 and 2007-2008. The graph illustrates a growing trend of the increasing number of inexperienced teachers which heightens the problem of new teacher turnover; the largest common group in the teaching force is the same group that has a 40-50% exit rate (Ingersoll, 2012).

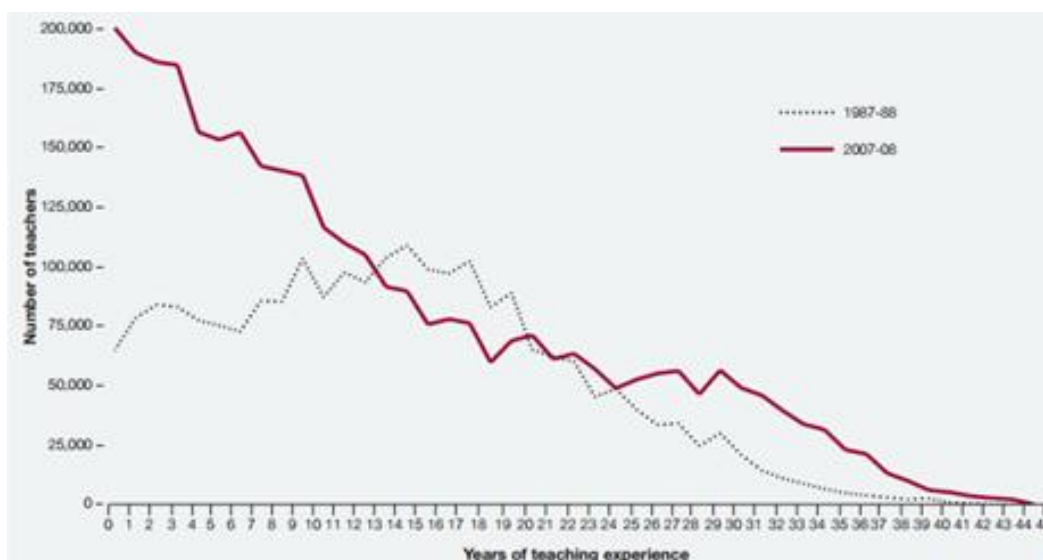


Figure 1. A comparison of years of teaching experience in 1987-88 and 2007-2008 (Ingersoll, 2012).

Education programs at colleges and universities continue to thrive, but the teacher shortage continues. College graduation data show the supply of new teachers meets the annual demand. According to a recent Illinois report, there were nine graduates in 2009 for each first-time teacher hired in 2010 (Sawchuk, 2013). The shortage of teachers continues to plague school districts due primarily to the number of teachers who leave education before retirement age and because of an increasing number of new teachers who leave within the first five years of their

career (Darling-Hammond, 1997). In addition, Ingersoll (2007) found in his research that nearly one-half of individuals professionally trained to be teachers never enter the teaching field.

Ingersoll and May (2012) found in their review of data from the National Center for Education Statistics, that the turnover rate for math teachers increased by 34% from the late 1980s to 2005. While the focus of their study was math and science, additional research showed that teacher shortages impact all fields of study (Fowler, 2009; Nichols et al, 2008; Van Houten, 2009). Data from these recent studies create a more convincing picture of the implications new teacher turnover presents, and it brings further attention to the challenges many school divisions face in hiring hard to staff positions such as math, science, and exceptional education. The reality is that teacher turnover, especially in the first five years of a teacher's career, impacts all curriculum areas (Fowler, 2009; Ingersoll & May, 2012; Nichols et al, 2008; Van Houten, 2009). Kopkowski (2008) referenced the U.S. Department of Education's 2005 data on teacher departures when stating that 54% of teachers who left teaching in 2003-2004 reported job dissatisfaction and a desire to find an entirely new career as the reason for their decision to leave. Ingersoll (2003), in a report for the NCTAF, referred to new teacher departures as a "revolving door". In a later article, Ingersoll stated that "roughly a million in this job [teaching] are in transition every year and that has consequences..." ("Teacher Exits", 2008, p.1) Unfortunately, the media often exacerbates negative perceptions held by many new teachers by reporting that U.S. schools are failing students and that American students continue to score lower than their global counterparts in all areas of education ("In Ranking", 2010). Without a closer examination of why new teachers choose to remain in the profession, new teacher turnover may continue to escalate.

It is also important to address the costly impact of attrition on school divisions nationwide. A conservative estimate of the cost to replace public school teachers who leave the education profession is \$2.2 billion a year. When the replacement cost is added to the cost of teachers who transfer among schools, the total increases to approximately \$4.9 billion each year. In Virginia, the calculated cost for teacher turnover, excluding retirement, is \$147,106, 125 (Alliance for Excellent Education [AEE], 2005).

Retaining teachers is a far larger problem than training new ones, and is a key to solving teacher shortages. In the years ahead, the chief problem will not be producing more new

teachers, as many seem to believe. The primary issue is an exodus of new teachers from the profession (Darling-Hammond & Sykes, 2003, p.3).

One step to discovering why a large number of new teachers leave the profession is to explore reasons why a significant number remain in the classroom despite teaching in the most challenging conditions.

Data from a teacher attrition survey conducted by the AAE (2005), found that approximately half a million teachers in the United States leave their schools each year with only 16% of the turnover attributed to retirement. The greatest two components impacting the supply of qualified teachers are based on two teacher decisions; (a) the decision to leave the profession entirely, and (b) the decision to transfer to a different school often in neighboring district (Ingersoll, 2001). These two decisions result in the remaining 84% of teachers who leave their school each year. This equates to an estimated 157,000 men and women leaving the teaching profession every year. In addition more than 232,000 others change schools, hoping for better working conditions often found in wealthier, higher-performing schools (AEE, 2005). The current problem with teacher turnover is not an inadequate supply of teachers to hire, but rather retaining new teachers beyond five years.

## **Chapter Outline**

The literature divided into four categories that have been identified in previous research as factors that impact teacher satisfaction as a predictor of new teacher retention. Section 5 will discuss Peck's (2002) study that was used as a model for this research.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support
- 4) Satisfaction as a determinant of new teacher retention
- 5) Peck's study as a model

## **Teacher Preparation Experiences**

Teachers leave the education profession at a faster rate than professionals in other employment fields (Carroll & Foster, 2004). To help combat teacher shortages, many states are



utilizing alternative, and typically faster, routes of certification to attract and recruit new teachers (Fowler, 2009). Alternative tracks to teaching, although an enticing recruitment strategy, are not an answer to the teacher shortage and retention problem (Ingersoll & Smith, 2003). In theory, teaching is an appealing profession to those new to the profession and to career switchers. Classroom hours are reasonable and summers are free. However, once in their own classroom, many new teachers soon realize the inordinate amount of work associated with the profession including the demanding workload outside contractual hours (Riggs, 2013). Teachers entering the profession for the first time, armed with knowledge and energy, quickly learn how unprepared they are in many facets of day to day operations. How a new teacher perceives the teaching profession and the reality of the actual experience often vary greatly (Nahal, 2009). Understanding teacher preparation experiences and providing early intervention in areas recognized as weaknesses may help contribute to higher rates of teacher retention.

New teachers often look at the profession through their lenses as a student. The classroom they envision often resembles the one they remember as student. Perception versus reality is quickly realized when new teachers step into a classroom for the first time (Anhorn, 2008; Melnick & Meister, 2008). This jolting dose of reality contributes to an estimated 157,000 men and women leaving teaching profession each year (AEE, 2005). Numerous factors contribute to a teacher's decision to leave, and specific deficiencies in preparation experiences is one area this study explored. In reviewing numerous research studies on new teacher attrition, Darling-Hammond (2003) found supporting evidence that teachers who lack adequate preparation are more likely to leave the profession when compared to those who feel they have the skill set necessary to be successful. The more training a new teacher receives, the higher the likelihood he or she will remain in the profession.

Ingersoll, Merrill, and May (2012) in their study of how preparation matters for new math and science teachers, found that teachers who received less pedagogical training and who had less practical experiences were more likely to leave teaching. Using the 2003-2004 *Schools and Staffing Survey* and the 2004-2005 *Teacher Follow-up Survey* as their data sources, Ingersoll et al. "focused on the effects of a wide variety of types of teacher preparation" (p. 31). Their study also found type of college, degree, and preparation route had little predictability on new teacher attrition. "Teachers who attended more selective undergraduate institutions were not significantly more or less likely to return for a second year of teaching" (p.32). In addition, the

attrition rates for math and science teachers who held education degrees did not differ greatly from new teachers who entered education through an alternative route. The study did find that pedagogy was strongly related to attrition. “Beginning teachers who had taken more courses in teaching methods and strategies, learning theory or child psychology, or materials selection were significantly less likely to depart” (p.33). Ingersoll et al., also reported that the amount of feedback a new teacher receives is a critical factor in whether a new teacher decides to remain in the profession.

Through the practicum and student teaching experiences, future teachers received feedback and support from several sources including college professors and supervising teachers. There can be a drastic decrease in this level of support during the first year of teaching (Anhorn, 2008). When new teachers close the doors to their first classroom, they are basically isolated from their colleagues. At the time when support is needed the most, new teachers are left to their own devices to succeed or fail (Ingersoll, 2012). In addition, new teachers are often assigned the most challenging and difficult students because veteran teachers feel they have put in their time and earned the privilege of teaching higher achieving students. At the high school level, new teachers may also encounter the additional stress of not being assigned an actual classroom; they are required to travel from room to room each class period they teach (Ingersoll, 2012). These problems, when combined with increased class sizes, inadequate supplies, and consistent budget cuts, can quickly transform a new teacher’s enthusiasm to the mindset of survival (Kardos & Johnson, 2010).

Strong content knowledge is only one component of being a successful teacher. New teachers must be proficient in pacing lessons, differentiating instruction based on the learning needs of their students, and must possess a thorough understanding of how to prepare students for required standardized testing (Kardos & Johnson, 2010). The steep learning curve is not limited to lessons learned in the classroom, in order to independently function in the learning community; new teachers must understand school division policies and the unwritten common laws of their individual school. Mandel (2006) found in his 15 years as a mentor and as a mentor trainer for Los Angeles schools, that new teachers are expected to recognize and quickly adapt to policies, both written and understood, including grading, finances, duties, safety and drills. All this is to be accomplished while meeting and collaborating with colleagues, seeking acceptance, and learning the complexities of the teacher evaluation programs. In his survey of 50 teacher

mentors in the Los Angeles school district that sought to identify areas where first-year teachers needed greatest support, Mandel found the following broad areas:

- (a) preparing for the first week of school including classroom set-up.
- (b) covering the required curriculum while maintaining student interest.
- (c) grading fairly.
- (d) working with parents.
- (e) maintaining personal sanity.

The practical experiences identified by Mandel, are difficult to replicate during the preparation period. New teachers enter the profession with limited practical experience and their needs differ markedly from those of veteran teachers. “Keeping the status quo will only result in continued new teacher attrition. We [school districts] must provide new teachers with the kind of information they most need to make it through their first year (Mandel, 2006, p.69).

The first year of teaching is challenging and is frequently perceived as unrewarding. Survival often replaces the desire to succeed for teachers in their first year (Flores, 2006). Sharpin, O’Neill, & Chapman in their 2011 study of coping strategies for adaptation to new teacher appointments, found that many new teachers faced consistently recurring problems that dominated their experience. Teachers in this study reported a high incidence of stress including, frustration, anxiety, guilt, disappointment, loneliness, and being overwhelmed. Of the 29 teachers in the qualitative study, representing 17 rural schools, 20% left their job within six months. By the end of the school year, the number of teachers who left rose to 40%. Nearly 60% of participants in the study experienced significant dissatisfaction in the quality of work life which resulted in new teachers making the decision whether to leave or remain in the teaching profession. He and Cooper (2011) found in their three-year study of five novice teachers, that classroom management, student motivation, and parental involvement were the three greatest challenges of beginning teachers. Teachers in He and Cooper’s study noted that classroom management was the area they felt the weakest, and was the challenge that resulted in the greatest frustration.

Ingersoll (2012) described a new teacher walking into the classroom for the first time as a sink or swim experience. In his analysis of induction data, Ingersoll compared the first year of teaching as “succeed or fail”, “lost at sea”, and “trial by fire” (p.1). New teachers entering the

profession faced an unexpected workload and high stress levels due to the enormous responsibility of having every student succeed. These stressors often resulted in new teachers questioning their judgment, their teaching ability, and their decision to become a teacher. These factors also lead to exhaustion, burnout, and in some cases resulted in sickness during the first years of teaching (Ingersoll, 2012). When new teachers begin to feel vulnerable, they may look to commiserate with veteran teachers who are also dissatisfied and disgruntled with the teaching profession. Without positive support, new teachers may begin to feel trapped in a profession that once was perceived as a passion. First year teachers are seeking the type of feedback they received during student teaching and practicum experiences and often struggle or question their judgment without it (Anhorn, 2008; Ingersoll, 2012; Kopkowski, 2008).

It is estimated that within the first five years of teaching, half of all new teachers will leave the profession (NCTAF, 2007). This five-year timeframe is also the average time it takes new teachers to master the art of teaching to maximize student learning (Darling-Hammond, 2003; Bartholomew, 2007). New teachers frequently give up and leave the profession before acquiring skills to effectively manage their learning environment and to attain the skills necessary to increase student achievement (Boyd, Grossman, Ing, Lankford, Loeb, & Wyckoff, 2010; Ingersoll, 2003; "Teacher Quality," 2005). This is especially true in low performing school districts where attrition at all levels of experience, impacts student success. Teachers leaving the profession and teachers transferring from low-performing schools create a financial burden on school districts when they repeatedly find and train replacement finding and training replacements. More importantly, students in these schools lose the value of being taught by an experienced teacher (AEE, 2005). Research shows that when comparing teachers with over 20 years' of experience to teachers who have completed their fifth year, there is little difference in the overall effectiveness (Rice, 2010). Such data reinforces the need to keep new teachers in the classroom beyond the fifth year.

Experiences that build resilience and provide real life experiences are essential to new teachers. Finamore (2008) defined resilience as "the ability to survive, and thrive from, stressful experiences while building up protective skills to manage future hardship" (p. 838). This definition encompasses the basic needs of a new teacher, building protective skills to grow and remain in the education profession. New teachers experiencing challenges are the best individuals to provide insight to school districts regarding the types of supports needed during

the first years of a teacher's career. It is important to study why some teachers stay in the profession while others give up (Darling-Hammond, 2003). The length of student teaching and other practical experiences, feedback received from these experiences, and the opportunities to observe and learn from veteran teachers were also factors found to be significantly related to whether or not a new teacher remained in teaching after the first few years. "Teachers who completed four and five-year teacher education programs and those who received other specific training and student teaching experiences, were 1/2 to 2/3 more likely to stay in the teaching profession" (Barnes, Crowe, & Schaefer, 2007; Darling-Hammond, 2003). These data suggest that teacher preparation programs and experiences gained during the preparation period have a strong bearing on the retention of new teachers (Ingersoll et al., 2012).

Retaining strong, new teachers should be a priority for all school leaders. Substantial research supports that well-prepared and capable teachers have the largest impact on student learning (Darling-Hammond, 2003). Anhorn (2008), in her qualitative research of six new teachers during the final months of their first teaching experience, found that new teachers and school divisions for which they work, can provide valuable insight to teacher education programs, pinpointing deficient areas where more experiences are needed. Teachers in the study reported the need for a variety of practical experiences with appropriate feedback, more realistic field experiences working with students with special needs, more knowledge of inclusion and exceptional education, and tips on how to work successfully with parents. Other areas pinpointed by first-year teachers where more preparation was needed were classroom management and discipline, working with mainstreamed students, determining appropriate expectations for students, dealing with stress, keeping up with paperwork, handling student conflicts, understanding the pacing of lessons, utilizing a variety of teaching methods, managing with students of varying abilities, and feeling inadequate as a teacher (Anhorn, 2008).

Teaching is an all-encompassing profession and new teachers require a strong foundation from university preparatory programs and support from school districts beyond mentoring programs. The focus on retaining new teachers begins with at the university level and continues with programs offered within the school division during the first year, when attrition is highest and when the effects of pre-service preparation may be the most powerful (Ingersoll et al., 2012). Teachers need preparatory programs that address challenges beyond general content knowledge.

New teachers report feeling least prepared in the area of classroom management which tends to be their greatest frustration and the area causes the feeling of inadequacy (He & Cooper, 2011).

Nahal's (2009) qualitative phenomenological study explored common themes of first-year secondary teachers looking specifically at their expectations of teaching prior to their first job, and the realities faced during the first year. Nahal used semi-structured interviews, allowing for open responses, to look at the actual lived experiences of 20 first year teachers from two school districts in Canada. He concluded that teachers need a clearer understanding of what is expected in order to achieve teaching success. "One hundred percent of participants indicated that teacher preparation program theoretical courses were irrelevant for classroom teaching in the first year and did not tie theory into practice. Each participant implied that classroom management courses in preparation programs are necessary" (p.9). In addition, 100% of the participants also noted differences between their expectations of teachings and the actual realities. Nahal's study found that 75% percent of the teachers assumed students would understand lessons taught and that parents would naturally support the teacher in discipline, and 55% felt students would be naturally motivated to learn.

Lack of practical preparation and the disconnect between preparation experiences and the daily challenges of teaching are just two areas in Nahal's study that contributed to new teacher turnover resulting in additional problems for school districts. The continued trend of new teachers leaving the profession creates a domino effect by reducing productivity and creating a drain on schools' financial and human resources but, more importantly, students miss the opportunity of learning from experienced teachers (Darling-Hammond, 2003).

### **Collegial Support**

Teaching is one of the largest occupations in the United States, accounting for approximately 10% of all college-educated workers (Ingersoll, 2012). For many of these teachers, education is a calling and a life ambition. The expectations of teaching and the reality of the first job can be vastly different (Nahal, 2009). The first teaching job often brings unexpected challenges that a novice teacher may not be fully prepared to manage. For this reason, new teachers need a strong support network of colleagues who understand the skills needed to thrive in their first year of teaching (Nahal, 2009). As evidenced in literature, positive

relationships among colleagues can provide emotional support, promote job satisfaction, improve teacher efficacy, and most importantly influence teacher retention (Anhorn, 2008; Nahal, 2009).

Darling-Hammond (2003) found in her extensive research on new teacher retention that school districts with strong support systems for new teachers actually reduced turnover rates for new teachers by more than two-thirds. Young teachers from these divisions not only remain in the profession at higher rate but “also become competent more quickly than those who must learn by trial and error” (p. 11). New teachers often struggle with confidence, competence, respect, and identity. They long to have a voice in decision making and they want to be listened to, to be taken seriously, and to be understood (Anhorn, 2008). The 2009 *MetLife Survey of the American Teacher* showed a clear correlation between quality school relationships and an increased rate of retention among teachers. According to the survey, 90% new of teachers, agreed that colleagues contributed to their success in the classroom and this was particularly true for teachers with 1-5 years of experience.

The reward of creating a collaborative school culture that nurtures new teachers and creates consistency in learning should result in two important outcomes, teacher retention and student achievement. The benefits teachers receive from quality relationships, trust, and collaboration translate to higher levels of student achievement (Bryk & Schneider, 2003; DuFour, 2004). New teachers crave connections and relationships with their peers and this requires more than simply assigning one mentor. New teachers seek a collaborative environment that provides the same level of support they received in college and throughout their student teaching experience (Kowpowski, 2008). Positive teachers influence colleagues by their level of motivation and enthusiasm for the job. Teachers who surround themselves with positive and encouraging colleagues often show an increased effort in the classroom. The presence of good teachers tends motivate colleagues through contagious enthusiasm or through embarrassment over the unfavorable performance comparisons (Jackson & Bruegmann, 2009).

Unfortunately, new teachers are not always welcomed by colleagues or supported by mentors. In Castro, Kelly and Shih’s (2008) qualitative study of 15 first-year teachers on resilience strategies for those teaching in high-needs areas, many new teachers felt they did not receive adequate support from their assigned mentor. Despite good intentions, the relationships were not always perceived as positive. New teachers reported feeling their mentor was too busy to help, did not know how to help, or did not have the knowledge to help. The teachers also

conveyed that they felt verbally attacked in certain situations, and that they sometimes received negative advice from their mentor. Several new teachers reported seeking out other colleagues who made them feel more comfortable. One teacher in the study described walking from classroom to classroom asking for advice from other teachers.

Support from colleagues has shown to play a significant role in overall teacher satisfaction and teacher's decision to remain at their current school (Brunetti, 2006). However, in many scenarios, veteran teachers have been described as territorial about sharing resources and instructional strategies, and they often leave new teachers to their own devices. During the sink or swim induction period, new teachers can feel excluded and isolated from veteran staff members. Not wanting to appear weak in their new position, they remain within the confines of the classroom (Ingersoll, 2012). In addition, new teachers have raised questions about how to best manage difficult relationships with adults within the school including co-workers, instructional assistants, and school administrators and the strategies they need to deal with these conflicts (Renard, 2003). Negative interactions with colleagues and other staff members increase teacher anxiety and frustration. "Although we [schools] may not want to acknowledge it, schools have a pecking order. Experienced teachers often feel they have paid their dues and new teachers must do the same. They may view surviving the first few years of teaching as a badge of honor" (Renard, 2003, p. 63). Because of this mindset, many young teachers are assigned the most challenging students, schedules, and duties (Patterson, 2005). Patterson (2005), a new teacher support provider for the Beginning Teachers Support and Assessment (BTSA) program, used the word hazing to describe conditions based on pecking order or years' experience. Patterson defined hazing as "institutional practices and policies that result in new teachers experiencing poorer working conditions than their veteran colleagues" (p. 21). She noted that of the 60 new teachers supported in the BTSA program, teachers who left the profession rarely mentioned the challenges long hours or low pay. "They left because they believed they were in impossible situations in which they would never experience success or career satisfaction" (p. 21). The new teachers were continually thrust into impossible situations where they could not be successful. New teachers possessed the least amount of experience but had the most difficult jobs.

Further augmenting the teacher turnover crisis, a growing number of teachers are generally dissatisfied with the teaching profession. In the 2009 Metlife survey, overall teacher job satisfaction was 62%. According to the most recent Metlife survey (2011) of teachers, this



percentage dropped significantly to 44% in 2011. With overall dissatisfaction among teachers the highest it has been since 1989, it is more necessary than ever to surround new teachers with colleagues who are passionate about working with students. Participants in Nahal's study (2009) noted that "collaboration and support from veteran colleagues enabled first-year teachers to endure a sense of acceptance as a member of the learning community" (p.7).

New teachers require strong support networks during their first years of teaching. These networks should be comprised of fellow teachers and administrators who understand the skills new teachers need to thrive during their first years in the classroom, while also providing teacher support programs to help manage their first year. Mentoring, ongoing induction programs, collegial support, and preparation for real-life teacher experiences are all necessary components in teacher retention (Anhorn, 2008). "Beginning teachers who have access to intensive mentoring by expert colleagues are much less likely to leave teaching in the early years" (Darling-Hammond, 2003, p. 11). Nahal (2009) found that support provided to new teachers by veteran colleagues helped build familiarity, a sense of belonging, and acceptance. "A strong social support network may contribute to higher levels of job satisfaction and self-efficacy, less feelings of stress, and higher retention rates (p. 7). New teachers must also learn how to advocate for themselves by requesting help in locating appropriate resources, and where to look for answers and strategies. Even the best intentioned, well-meaning colleagues and administrators get lost in the frenzied demands of the workplace. Such chaos and stress should not be to the detriment of new teachers. The goal of retention is a total school effort that relies upon a collaborative and supportive learning community where new teachers feel safe asking for help (Castro et al, 2010). Positive and productive working relationships with colleagues are frequently cited as a reason for remaining in the teaching profession (Loeb et al. 2005).

### **Principal Support**

When new teachers are asked to identify factors most important to retention, supportive leadership is cited repeatedly as the most important factor ("In Ranking", 2010; Boyd et al. 2010). The 2008-2009 SASS data indicate that 38.8% of new teachers classified as movers, left their current school because of, (1) lack of support from the administration, and (2) dissatisfaction with the administrator(s). In addition, 15.1% of teachers cited student discipline problems as the reason. All three factors combined, account for 53.9% of the reasons why

teachers with 1-3 years' experience moved from one school location to another, and all reasons had a direct connection to the principal. The same survey revealed that 28.6% of teachers were classified as leavers who planned to leave the teaching profession entirely. Like the movers, 21.3% of leavers cited dissatisfaction with administrators and administrative support as the reason for leaving.

In an interview with Riggs (2013), University of Pennsylvania education professor, Richard Ingersoll, reported that teachers who are assigned a mentor, and teachers who have regular conversations with an administrator, are more likely to remain in teaching. The role of the principal has evolved over the last twenty years resulting in many school divisions viewing administrators as instructional leaders and no longer as school managers (Leithwood & Riehl, 2003). The following statements were taken from different studies regarding what veteran teachers believe about school leadership:

- Teachers need a good environment to thrive, and that environment, considered the school culture, begins with the principal (Borsuk, 2010).
- As teacher satisfaction with working conditions and principal leadership increased, so too did the teachers' intention to remain in the school district and at the school site (Wynn et al., 2007).
- New teachers require strong administrative support to remain in the teaching profession (Ingersoll 2001, 2003)

A recent study conducted by Pogodzinski et al. (2012) used survey data from new middle and elementary teachers representing 11 school districts with similar demographics "to examine the association between novices' perceptions of the administrative climate and their desire to remain teaching within their school" (p. 252).

To measure administrative climate, teachers were asked to report on, (a) the quality of relations between administrators and teachers across the school, (b) the adequacy of resources available to perform their jobs, (c) the level of interference of administrative duties with their teaching work, and (d) the manageability of their workload (p. 260).

The multilevel regression analysis concluded that “the quality of administrator and teacher relations was a stronger predictor of new teacher retention than inadequate resources, workload, and additional duties (p. 1).

Administrative support can be defined as, “the extent to which principals and other school leaders make teachers’ work easier and help them to improve their teaching” (Boyd et al, 2010, p. 307). New teachers desire the support they received during their preparatory period including student teaching.

In addition to findings related to collegial support and preparation experiences, Nahal’s (2009) study also found that new teachers need administrators who are visible, who understand the challenges encountered by first-year teachers, and who help provide skills essential to tackling problems that can only be learned with experience. Administrators who help new teachers learn a school’s culture and who work with new teachers to establish their educational philosophy; will play a significant role in a new teacher’s success and self-efficacy. While new teachers require support from all areas within a school, they look to principals to ensure support for mentoring, to encourage collegial support, and to ensure ongoing induction programs that will help them grow and want to remain in the profession (Ingersoll & Smith, 2003).

With an estimated 40-50% of new teachers leaving the profession within the first five years, and higher exit rates for teachers at high-risk schools, the challenge for principals to take a proactive role in beginning teacher retention cannot be ignored (Darling-Hammond & Skyes, 2003; Ingersoll, 2003). Principals who promote collaboration and who encourage input from teachers within their building, create a comfortable learning environment where teachers are compelled to share instructional strategies to both new and experienced colleagues, while also establishing a positive view of the profession for new teachers (Wong, 2004). Visible principals who have their finger on the pulse of the school may more quickly identify early warning signs of a struggling new teacher and be able to put the necessary supports in place to help the teacher work through challenges that only experience can improve.

The principal’s role encompasses many factors in supporting teachers in their quest to educate each and every child in their classrooms. Many schools and teachers are looking for transformational leaders who possess a strong working knowledge of instructional content. “This type of leadership enlists and motivates followers to identify with the leader and to develop an affinity for collective goals and visions” (Eyal & Roth, 2011, p. 257). By improving conditions

within the school for all teachers, an administrator can have a positive impact on new teacher retention. “Improving teachers’ working conditions would contribute to lower rates of new teacher turnover, thereby diminishing school staffing problems and improving the performance of schools” (Ingersoll & Smith, 2003, p.5).

### **Satisfaction as a Determinant of New Teacher Retention**

Research indicates that teachers who are satisfied with overall work conditions including a multitude of job related factors, choose to remain in the teaching profession (Halstead, 2013; Henk et al., 1997). In a recent 2010 study, 9,690 teachers in the Wake County Public School (WCPSS) district participated in the *North Carolina Teacher Working Conditions* (TWC) survey that included various characteristics of the school environment (Halstead, 2013). The purpose of the study was to “determine the direction and magnitude of the relationship between teacher satisfaction in WCPSS, as measured by the TWC Survey and annual teacher turnover” (Halstead, 2013, p. 4). Using a 5-point Likert scale, 91% of teachers responded to the survey statements by rating the extent to which working conditions were true based on their personal experiences. In addition, the Office of Research and Planning provided two types of turnover data for comparison analysis. Turnover was measured by: (a) the number of teachers at each school in the district in March 2010, and (b) those who remained at the same school location in 2011. Turnover was defined as: (a) teachers who were teaching in a different WCPSS school in March 2011, and (b) teachers who left the system to teach in another school system. Survey responses were compared to turnover data in order to explore possible relationships. Using the teacher’s assigned school as the unit of analysis, correlations were run between the TWC survey domains and the teacher turnover data, to determine if any relationship existed between the constructs. “Results indicated that teacher satisfaction with their work conditions was positively associated with the percentage of teachers who stayed at their school the following year” (Halstead, 2013, p. 1). One limitation to this study was that it did not include the number of teachers who left the profession entirely and, it is important to note that Halstead’s analysis of Wake County’s data included all levels of experience where this study focused specifically on new teachers. Data presented in the literature review reveals a continuing increase of teachers with 1-5 years’ experience exiting the profession. (Ingersoll & May, 2012; Darling-Hammond & Skyes, 2003; Ingersoll, 2003; Ingersoll & Smith, 2003).

## **Modeling a Previous Study**

Peck's (2002) study of 70 high school teachers, representing six high schools in Wisconsin with similar demographics, sought to "examine the relative importance of factors new high school teachers report as influencing their decision to stay or leave the teaching profession" (p. 37). Based on attrition research, Peck focused on the following seven factors found to influence teacher retention: (a) work assignment, (b) relationship with other teachers, (c) relationship with the principal, (d) educational preparation, (e) school environment, (f) community atmosphere, and (g) reward. In addition, Peck compared how the seven factors differ in their influence on a new teacher's decision remain in teaching or leave the profession entirely and addressed which variables were the most strongly correlated with the decision.

The dependent variable in Peck's study was the teacher's "perceived likelihood of staying or leaving his or her teaching position within the same school and his or her overall satisfaction with the teaching profession" (p. 37-38). The dependent variable was assessed using a cluster of four questions in the survey combined to create a composite satisfaction scale. "The composite satisfaction construct is [was] important to the study for it assumed that new teachers satisfied with their jobs will [would] stay in the teaching profession" (p. 48).

The independent variables were the seven factors identified through Peck's literature research as having influence on new teacher retention. A series of questions were developed for each predictor variable using a five-point Likert scale of ordinal, closed-response categories. Respondents were asked to gauge the intensity of their personal feeling toward the statements included for each question with response options ranging from "Strongly Agree" to "Strongly Disagree".

Peck's study serves a favorable model for this research in that it sought to find relationships between job-related factors and new teacher retention in an effort to provide school districts research based data to improve new teacher retention rates. Like Peck's study, this study examined the influence specific variables had on new teacher retention and how those factors differed in their influence on the new teachers' decision to leave or stay. However, this study limited the number of independent variables to three non-pecuniary factors from Peck's study that can be addressed and managed at the school and preparatory levels. The three factors in the study were:

- 1) Teacher preparation experiences
- 2) Collegial Support
- 3) Principal Support

The dependent variable for the study was overall teacher satisfaction as a determinant of retention. Like Peck's study, and as shown in other research studies, the underlying assumption is that job satisfaction leads to retention (Halstead, 2013; Weiqi, 2007; Henke et al., 1997). Additionally, this study will expand the population sample to include all secondary teachers' with 1-5 years' experience, representing 21 middle and high schools from one school district. Peck's study was limited to high school teachers only. With Peck's permission (see Appendix A), the data collection instrument used in his study was modified to reflect current changes in educational trends.

### **Summary**

As the concern for new teacher retention continues, teaching preparatory programs at universities continue to thrive and the number of graduates exceeds the number of teaching positions available in schools. According to a recent Illinois report, there were nine graduates in 2009 for each first-time teacher hired in 2010 (Sawchuk, 2013). Teacher turnover is a costly burden for school districts and funding that could be spent for instructional resources is instead used to repeatedly hire and train new teachers (Darling-Hammond, 2003). Teacher attrition has increased by 50% over the last 15 years and costs just nearly \$7 million a year (NCTAF, 2007). As presented in the literature review, new teachers leave the profession for a myriad of reasons. If the expectation is to have qualified teachers in every classroom as defined by NCLB, schools must be willing to change the way they operate and the way that teachers are managed (Ingersoll, 2012). Unlike most professions, new teachers do not have a gradual introduction to the classroom, they are expected to fully function the first day and complete all tasks of the veteran teachers (Andrews & Quinn, 2004).

Research provided in the literature review supports the need to further explore factors that impact and support new teacher retention. Over a decade of data indicate that teacher turnover within the first five years of work plagues school divisions with a ripple effect that includes the cost of hiring and retraining new teachers annually, and the direct impact that inexperienced teachers have on student achievement. It is important to recognize that 25% of the

teaching profession is comprised of teachers with less than five years' experience and this is the same group that has a 40-50% exit rate from the profession, proving that new teacher turnover continues to be a problem in schools across the nation (Ingersoll, 2012). As startling as these numbers are, it is equally important to examine the data from a different perspective, one that explores why 50-60% of new teachers choose to remain. New teachers themselves are likely to provide the best possible solutions to the retention dilemma. Retaining new teachers should not be an anomaly, it should be the expectation.

## **Chapter 3**

### **Methodology**

#### **Purpose of the Study**

The purpose of this study was to explore the level of influence the factors below have on new teacher retention.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

This study modeled Peck's (2002) study in which he also sought to explore the degree of influence that different variables have on new teacher retention.

#### **Research Questions**

The three research questions in this study explored new teachers' perceptions regarding the level of influence the three non-pecuniary factors of (a) teacher preparation experiences, (b) collegial support, and (c) principal support had on new teacher retention

- 1) Are there differences in new teacher retention based on teacher preparation experiences?
- 2) Are there differences in new teacher retention based on collegial support?
- 3) Are there differences in new teacher retention based on principal support?

The research hypotheses for each research question were as follows:

- 1) There are significant differences in new teacher retention based on teacher preparation experiences.
- 2) There are significant differences in new teacher retention based on collegial support.
- 3) There are significant differences in new teacher retention based on principal support.

The null hypotheses for each research question were as follows:



- 1) There are no significant differences in new teacher retention based on teacher preparation experiences.
- 2) There are no significant differences in new teacher retention based on collegial support.
- 3) There are no significant differences in new teacher retention based on principal support.

### **Research Design**

Quantitative research was conducted utilizing a non-experimental, comparative design study that examined three non-pecuniary factors and the influence each had on a new teacher's decision to remain in the teaching profession. A cross-sectional survey was utilized to collect data from participants selected by a quota sampling strategy. Quota sampling was defined as subjects selected on the basis of characteristics of the population (Macmillan & Schumacher, 2006). In quota sampling, the researcher identifies major groups or characteristics of the selected population and then selects subjects non-randomly based upon those characteristics (Macmillan & Schumacher, 2006). Teachers with one to five years' experience employed by one suburban school district in central Virginia were invited to participate in the survey.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

The purpose of using quantitative research was to determine if the independent variables were statistically significant in predicting new teacher retention. "These variables, in turn, can [could] be measured, typically on instruments, so that numbered data can [could] be analyzed using statistical procedures (Creswell, 2009, p. 4).

### **Data Collection and Time Frame**

An electronic questionnaire was distributed to participants by email as a method of collecting data utilizing a web-based surveying product provided through Virginia Polytechnic Institute and State University (see Appendix B). The survey website was accessible at [survey.vt.edu](http://survey.vt.edu) for the three week data collection period. Data were analyzed using the Statistical

Package for the Social Sciences (SPSS). The Department of Research and Planning for the selected school district served as the conduit for the distribution of surveys to all full-time secondary teachers with 0-5 years' experience. After receiving permission from the selected school district (see Appendix C) and IRB approval from Virginia Tech (see Appendix D), the following timeline was implemented for data collection:

- 1) November 3, 2014: Potential participants received an email invitation to participate in the survey including a cover letter explaining the purpose of the study (see Appendix E), the Informed Consent Form (see Appendix F), and the URL link to the study.
- 2) November 10: Potential participants received a follow-up email to encourage those who had not completed the survey to do so, and to thank those who had already submitted the survey (see Appendix G).
- 3) November 17: Potential participants received a third and final email to participate in the research survey including the URL and consent form (see Appendix H). Based on the number of responses, a third and final email reminder was necessary for obtaining a higher response rate.

The survey was estimated to take participants approximately 20-30 minutes to complete and did not require follow-up once submitted. Participation in the survey was completely voluntary, and confidentially was ensured.

### **Instrument Design**

Independent variables were identified through the literature review process and the conceptual framework. Like Peck's (2002) study, the influence of selected independent variables were measured, but for this study, the independent variables were limited to the following three, non-pecuniary variables also measured in Peck's study: (a) teacher preparation experiences, (b) collegial relationships, and (c) principal support. The rationale for selecting non-pecuniary variables was, that based on findings, school administrators and university programs could use collected data to modify and improve current practices in an effort to increase new teacher retention without cost prohibiting issues. The independent variables were defined as follows. Teacher preparation experiences included all classroom instruction at the university level and all practical experiences students participated in prior to obtaining a teaching position including

internships and student teaching. Collegial relationships were defined as the support, value, and acceptance provided to a new teacher by other teachers and staff members in a school. Principal support was defined as the level and types of support provided by the building principal including observations, individual conferences, professional opportunities, ancillary duties, and teaching assignments. The dependent variable was the new teacher's perceived likelihood of remaining or leaving the teaching profession using overall satisfaction as a determinant of retention.

For each predictor variable, a set of questions were developed using a five-point Likert scale for responses. "The Likert scale is the most commonly used psychometric scale among psychological measurements that require self-reporting" (Wakita, Ueshima, & Noguchi, 2012, p. 534). Data derived using a Likert scale provides numerical measurement results that can be used for statistical inference and measurements and which are proven to provide good reliability (Li, 2013). An ordinal level of measurement with two anchors (1="Strongly Agree to 5="Strongly Disagree") for rating was used for responses. Ordinal measurements are often used when measuring client satisfaction (Engel & Schutt, 2009). Using questions that focused on teacher preparation experiences, collegial support, and principal support from Peck's (2002) questionnaire, with author approved modifications (see Appendix A), the following rating system was used for participant responses:

"Strongly Agree"	(5)
"Agree"	(4)
"Neither Agree or Disagree"	(3)
"Disagree"	(2)
"Strongly Disagree"	(1)

The sum of responses for items associated with each predictor variable were categorized to report the perceived level of influence of each independent variable as strong, moderate, or low. These levels were used for descriptive purposes and to create levels for inferential analysis. To determine whether significant differences existed among mean scores of the dependent variable based upon the levels of the three independent variables, statistical analyses were conducted for each independent variable separately and simultaneously.

The following range for questions (1a-j), as developed by the researcher, was used to measure the perceived influence of teacher preparation experiences on a new teacher's decision to remain in the teaching profession:

A score between 40-50 represented a strong influence.

A score between 25-39 represented a moderate influence.

A score between 10-24 represented a low influence.

For questions (2a-2h), the following range, as developed by the researcher, was used to measure the perceived influence of collegial support on a new teacher's decision to remain in the teaching profession.

A score between 30-40 represented a strong influence.

A score between 18-29 represented a moderate influence.

A score between 8-17 represented a low influence.

For questions (3a-3K), the following range, as developed by the researcher, was used to measure the perceived influence of principal support on a new teacher's decision to remain in the teaching profession.

A score between 42-55 represented a strong influence

A score between 27-41 represented a moderate influence

A score between 11-26 represented a low influence

The dependent variable for this study was an overall satisfaction composite measured by questions that explored four areas of teacher satisfaction. For these questions, teachers were asked to record the intensity of their responses on a 100-point continuum. There were 4 items, each scored on the continuum, resulting in a score range of 4-400. To minimize the impact of the 100-point scale, scales were reduced to 10-points before conducting the data analysis. According to Engel & Schutt (2009),

When several questions are used to measure one concept, the responses may be combined by taking the sum or averages of responses. The idea is that idiosyncratic variation in response to particular questions will average out so that the main influence on the

combined measure will be the concept on which all the questions focus. Each item is an indicator of the concept, but the item alone is often not a sufficient measure of the concept. Therefore, the scale is a more complete measure of the concept than any single component question (p. 55).

For questions (7a-d), the following range, as developed by the researcher to report descriptive analysis, was used to measure the likelihood of retention based on the teachers' overall satisfaction with the teaching profession.

A satisfaction score between 4-10 signifies the likelihood of retention as extremely unlikely.

A satisfaction score between 11-20 signifies the likelihood of retention as unlikely.

A satisfaction score between 21-30 signifies the likelihood of retention as likely.

A satisfaction score between 31-40 signifies the likelihood of retention as extremely likely.

It is important to note that the categories listed for the dependent variable were developed for descriptive purposes and the continuous values were used for inferential analyses to determine if differences found were statistically significant and not a result of chance. Inferential statistical analysis indicate what the chances are that the null hypothesis is true" (Sommer, n.d.).

Three additional groups of questions were included in the survey. Question 4 asked respondents to rate the degree to which the listed concerns were perceived as obstacles to teaching. Question 6 asked teachers to rank the three predictor variables in order of perceived influence on new teacher retention. Question 8 reflected demographic data collected. Teachers were asked to respond to questions based gender, age, years' experience, career switcher status as well as questions targeting personal experiences during the preparatory period and during the first year of teaching. The data collected in Question 8 provided covariates for further analysis in the study. The researched believed that the covariates used for analysis could potentially influence the independent variable resulting in better predictions of teacher retention. Once the data analysis process was initiated, the researcher eliminated questions 4 and 6. Both questions were intended to provide data for future studies and responses to the questions would not influence the findings for this study.

## **Instrument Validation**

Peck (2002) established content validity (see Appendix I) by conducting a pilot test of construct related questions at two large Wisconsin high schools, and after appropriate revisions, “all internal consistency estimates for the study questionnaire constructs exceeded a Cronbach alpha score of .70” (p. 47). The seven constructs from Peck’s study were: (a) work assignment, (b) relationship with other teachers, (c) relationship with the principal, (d) educational preparation, (e) school environment, (f) community atmosphere, and (g) reward. See Appendix I for individual Cronbach Alpha scores for each construct used in Peck’s study.

## **Population**

A quota sample of all new secondary teachers with 1-5 years’ experience from one suburban school district in central Virginia made up the population of the study. Peck’s study (2002) had a sample size of (N=70) that included teachers with 1-3 years’ experience representing six high schools in Wisconsin. This study included a sample size of (N=184) that included new teachers from 21 secondary schools, 12 middle and 9 high schools, within one school district. Surveying a larger population resulted in a larger sample size which increased the potential for validity and allowed for parametric analysis of the results (Hartley, 2014).

## **Site Related Benefits**

The results of the study benefit all stakeholders involved. Participants should experience intrinsic reward from the positive feeling of helping advance research in an area of personal and/or professional interest (American Association for Public Opinion Research [AAPOR], 2003). Results of the survey represented the voice of participants and their perceptions regarding the level of influence specific factors had on new teacher retention.

The school district also benefited from the results of the study by being provided researched based data to promote a better understanding of how teacher preparation experiences and support from colleagues and principals influenced new teacher retention. In acknowledging the level of influence specific factors had on retention, school districts should be more proactive in providing necessary supports to new teachers with 0-5 years’ experience. Recognizing and addressing the fact that new teacher attrition continues to be a concern nationwide, and having

meaningful supports in place for new teachers, should reduce the percentage of new teachers who move from one school location to another and those who leave the profession entirely.

The value for the researcher is intrinsic in nature. She has been a school administrator for 10 years in the selected school district and during this time has observed the transient tendencies of some new teachers in several schools. In her experience, new teachers who do not quickly find their niche or level of comfort within the first few months of teaching, exude a demeanor of unhappiness and questionable self-confidence. By providing new teachers a collective voice in the levels and types of support needed, district and school administrators will have the data necessary to better understand and address the specific needs of new teachers in an effort to reduce attrition.

### **Descriptive Statistics and Data Analysis**

Descriptive statistics was used to describe and summarize the analysis of data from the survey. Because there was more than one level of the independent variables, an analysis of variance (ANOVA) based on a fixed effects model was used for data analysis using a probability value of .05 to determine statistical significance. "Fixed effects means the values of the independent variable have been purposively chosen for investigation" (Craig, 2012, p. 27). ANOVA allows us [researchers] to look differences between sample means with no restriction on the number of means" (Howell, 2011, p. 407). Measures of effect size in ANOVA can be described as the strength of association between the independent variables and the dependent variable (Craig, 2012).

An analysis of variance will calculate both how well all the variables together predict the dependent variable and whether or not the individual variables are related to the dependent variable using the F-test for statistical significance and the eta measure of effect size (Muijs, 2010, p. 196).

Both the research hypothesis and the null hypothesis were accepted or rejected based on the F-test results for research questions 1-3. Because the ANOVA determined significant differences in the analysis for research question three, a post hoc after-the-fact, multiple comparisons analysis was conducted to search the data for significant differences among the variables. In addition to the post hoc after-the-fact multiple comparisons analysis, a factorial

ANOVA was calculated on new teacher retention using a combination of teacher preparation experiences, collegial support and principal support. “A factorial design is one in which we include all combinations of the levels of the independent variables” (Howell, 2011, p. 454). As an extension of the factorial ANOVA, a factorial analysis of covariance (ANCOVA) was conducted to explore the possible effects that adding covariates to the independent variables would have on predictions of teacher retention. ANCOVA can be described as a statistical adjustment that attempts to control important factors in a study (Research Methods Knowledge Base [RMKB], 2006, p. 1). “Analysis of covariance is used to test the main and interaction effects of categorical variables on a continuous dependent variable, controlling for the effects of selected other continuous variables, which co-vary with the dependent” (Lehigh University, n.d., p. 1). For this study the covariates were age, gender, and career switcher status. The categories for each covariate are described below:

- (a) For the variable of age, participant were grouped into the following ranges: (20-29), (30-39), (40-49), (50-59), and (60+).
- (b) For the variables of gender, the response options were male or female.
- (c) For the variable of career switcher, participants responded yes or no to the question, “Is teaching your first career?”

A multiple regression analysis was also used to, “explore the utility of combining various predictors of teacher satisfaction” (Peck, p.67). The three independent variables were used as possible predictors, and the criterion was the composite measure of teacher satisfaction. A multiple regression analysis shows the strength between each independent variable, the combined model that includes all independent variables, the dependent variable, the relative strength of each independent variable, and whether there are interactions between the independent variables (Urdan, 2010). Like ANOVA, Multiple regression can be used to predict the dependent variable outcome. The coefficient of determination ( $R^2$ ) is used to explain the percentage of the variance that results from the combined predictor variables (Rose, 2012).

### **Data Treatment and Confidentiality**

All data was reported in aggregated form and participant confidentiality was protected through anonymous survey design reporting. Data was maintained on the researcher’s personal



computer and back-up flash drives that were secured in a locked safe at the researcher's home. All data and analysis associated with the research study was maintained through the successful defense of this dissertation.

### **Summary**

The methodology for this study is employed to measure the influence of the following three non-pecuniary constructs on new teacher retention:

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

Data analysis included six tests to examine the three independent variables individually and simultaneously to consider individual effects of each variable separately, and the interacting effects of the three variable as predictors to new teacher retention. The six tests included three one-way ANOVA analysis, one for each research question; a factorial ANOVA, a factorial ANCOVA, and a multiple regression.

## Chapter 4

### Results

This chapter reports the results of this quantitative, non-experimental design study that explored non-pecuniary factors that influence a new teacher's decision to remain in the teaching profession. A comparative design utilizing a cross-sectional survey collected data from participants selected using a quota sampling strategy. Teachers (N=184) with one to five years' experience employed by one suburban school district in central Virginia were invited to participate in the survey.

The purpose of this study was to explore the level of influence the three factors listed below have on a new teacher's decision to remain in the profession.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

The research questions were: (1) What differences exist in new teacher retention based on teacher preparation experiences? (2) What differences exist in new teacher retention based on collegial support? (3) What differences exist in new teacher retention based on principal support?

### Demographic Findings

The survey was sent to the 339 secondary teachers with 1-5 years' experience from one school district with a response rate of 54.28%, 184 (N=184) responses. According to Krejcie and Morgan's (1970) *Table for Determining Sample Size from a Given Population*, a population of 340 (N=340), required a sample size of 181. Using Krejcie and Morgan's table as a guide, the 184 response (N=184) rate, was an adequate sample size for this study.

Table 1 outlines the demographic characteristics of the quota sample. The gender representation of the new teachers included 73.6% (N=134) females and 26.4% males (N=48). The largest percentage for age range was reflected in the 20-29 age group with 57.7% (N=101) of respondents, followed by the 30-39 age group with 26.3% (N=46) respondents. The highest degree reported for over 58.8% (N=99) of participants was a master's degree, followed closely by 41.3% (N=76) with a bachelor's degree. Only 4.9% (N=9) of participants held a post-master's degree or doctorate. Fifty-eight per cent (N=108) of participants represented those who chose

teaching as their first career, 41.3% (N=76) had at least one other career prior to entering the teaching profession.

Table 1

*Demographic Characteristics of Participants (N = 184)*

Characteristic	N	%
Gender		
Female	134	73.6%
Male	48	26.4%
Missing Data	2	1.1%
Highest Degree Earned		
BA or BS	76	41.3%
Masters	99	53.8%
Post Masters	5	2.7%
Doctorate	4	2.2%
Age Range		
20-29	101	57.7%
30-39	46	26.3%
40-49	17	9.7%
50-59	9	5.1%
60+	2	1.1%
Teaching is first career		
No	76	41.3%
Yes	108	58.7%

### **Reliability of the Questionnaire Constructs**

This study modeled Peck's (2002) study in which he sought to explore the degree of influence that seven different variables had on teacher retention. Like Peck's (2002) study, the influence of selected independent variables on a new teacher's decision to remain in the teaching profession was measured. For this study, the independent variables were limited to the three non-pecuniary independent variables from Peck's (2002) original study. An item analysis was conducted for each construct to explore consistency and internal reliability. The mean and standard deviation were calculated for each item. In addition, a Cronbach alpha was calculated for each scale, as an index of internal reliability.

**Teacher preparation experiences:** The ten questions for this construct reflected all classroom instruction at the university level and all practical experiences respondents participated in prior to obtaining a teaching position including internships and student teaching. All ten question items on this scale were retained resulting in a Cronbach alpha score of .793.

**Collegial support:** The eight questions for this construct reflected the support, value and acceptance provided to new teachers by veteran teachers and other staff members. The eight items on this scale resulted in a Cronbach alpha score of .670. Item 2b, “Colleagues frequently ask how I am doing or how I can help”, was removed resulting in a Cronbach alpha score of .85.

**Principal support:** The eleven questions for this construct reflected the types and levels of support provided by the building principal including observations, individual conferences, professional opportunities, ancillary duties, and teaching assignment. All eleven question items on this scale were retained resulting in a Cronbach alpha score of .919.

**Satisfaction as a determinant of retention:** The four questions for this construct reflected a new teacher’s perceived likelihood of remaining or leaving the teaching profession using the overall level of satisfaction as a determinant of new teacher retention. All four question items on this scale were retained resulting in a Cronbach alpha score of .735.

The characteristics of the various constructs and their scales are summarized in Table 2. Table 3 includes each variable, the number of questions for each variable and the corresponding Chronbach alpha. All variables are above the minimum accepted reliability score of .70 (McMillian & Schumacher, 2006).

Table 2

*Internal Consistency Reliability of the Item Analysis of Constructs*

Name of Factor	N	Alpha
1. Teacher preparation experiences	10	.793
2. Collegial Support	7	.850
3. Principal Support	11	.919
4. New Teacher Retention	4	.735

## Descriptive and Statistical Analysis

Each independent variable was comprised of a series of questions using a five-point Likert scale for responses. An ordinal scale of measurement with two anchors, (1) “Strongly disagree” to (5) “Strongly agree”, was used for responses. Each independent variable described below corresponded to one of the three research questions. The sum of responses for items associated with each predictor variable were categorized by the researcher to report the level of perceived influence as strong, moderate, or low.

**(1) Teacher preparation experiences:** Questions for this construct focused on the teachers’ perceptions of how well they were prepared for their first teaching position (see Appendix J). There were 10 items with a value of 1-5 for each, resulting in a score range of the range 10-50. Items included: (1a) My university training adequately prepared me to teach the subjects I am currently teaching. (1b) I was adequately prepared to meet the needs of English language learners. (1c) I was adequately prepared in the areas of Individualized Education Plan and 504s. (1d) I was adequately prepared with strategies to differentiate instruction. (1e) I was adequately prepared to handle social issues in the classroom including prejudices and biases. (1f) I was adequately prepared to teach reluctant learners. (1g) I was adequately prepared to manage discipline problems. (1h) I was adequately prepared to manage the paperwork associated with teaching. (1i) My student teaching experience exposed me to challenges similar to those in the first year of teaching. (1j) My student teaching experience was positive. The following range, as developed by the researcher, was used measure perceived influence:

A score between 40-50 represented a strong influence.

A score between 25-39 represented a moderate influence.

A score between 10-24 represented a low influence.

**(2) Collegial support:** Questions for this construct focused on the perceived influence that support, value and acceptance provided by veteran teachers and other staff members had on a new teacher’s decision to remain in the teaching profession (see Appendix K). There were 8 items with a value of 1-5 for each, resulting in a score range of the range 8-40. Items included: (2a) Colleagues respect and value my opinion. (2b) Colleagues frequently ask how I am doing or how they can help (2c) Colleagues are willing to share instructional resources. (2d) I lack support from colleagues. (2e) I receive formal or informal recognition from my colleagues. (2f) I can

share professional concerns with at least one colleague. (2g) I trust my colleagues. (2h) I am invited to socialize with colleagues outside the school day. The following range, as developed by the researcher, was used measure perceived influence:

A score between 30-40 represented a strong influence.

A score between 18-29 represented a moderate influence.

A score between 8-17 represented a low influence.

**(3) Principal support:** Questions for this construct focused on the perceived influence that principal support including observations, individual conferences, professional opportunities, ancillary duties, and teaching assignment had on a new teacher's decision to remain in the teaching profession (see Appendix L). There were 11 items with a value of 1-5 for each, resulting in a score range of the range 11-55. Items included: (3a) My principal informs me about district policies. (3b) My principal supports me with student discipline issues. (3c) I am comfortable talking to my principal about job-related concerns. (3d) My principal has a clearly defined vision. (3e) My principal has high performance expectations for teachers. (3f) My principal inspired me to reach my full professional potential. (3g) My principal often visits my classroom. (3h) My principal models behavior consistent with the values of the school. (3i) My principal recognizes accomplishments formally or informally. (3j) My principal encourages collaboration among staff members. (3k) My principal demonstrates a personal interest in my professional well-being. The following range, as developed by the researcher, was used to measure perceived influence:

A score between 42-55 represented a strong influence.

A score between 27-41 represented a moderate influence.

A score between 11-26 represented a low influence.

The dependent variable for this study was the overall teacher satisfaction composite measured by questions that explored four areas of teacher satisfaction. For these questions, teachers were asked to record the intensity of their responses on a 100-point continuum. There were 4 items, each scored on the continuum, resulting in a score range of the range 4-400. To minimize the impact of the 100-point scale, scales were reduced to 10-points before conducting the data analysis. Question (7a) asked teachers to what degree, based on their personal

experiences, would they recommend a qualified student to pursue a career in teaching. Question (7b) asked teachers how likely it was that they would leave the teaching profession to pursue a different occupation. Question (7c) asked teachers how likely it was that they would leave their current school to teach somewhere else. Question (7d) asked teachers to what degree they are satisfied with their current job. Questions (7b) and (7c) were reversed scored so high values reflected a higher level of satisfaction. The following range, as developed by the researcher, was used to measure likelihood of retention based on the teachers' overall satisfaction with the teaching profession as determined by questions 7a-7d:

A satisfaction score between 4-10 signifies the likelihood of retention as extremely unlikely.

A satisfaction score between 11-20 signifies the likelihood of retention as unlikely.

A satisfaction score between 21-30 signifies the likelihood of retention as likely.

A satisfaction score between 31-40 signifies the likelihood of retention as extremely likely.

For questions 7a-7d, the range of values matches the categories of satisfaction. The categories are presented for descriptive purposes only and reflect teacher satisfaction as a determinant of retention for this study. Table 3 shows the item analysis constructs and their ranges. The Level of Influence in Table 4 shows the three predictor variables and the response range for questions associated with each. The Level of Retention represents the dependent variable and is taken specifically from questions 7a-7d. Again, for descriptive purposes, the Level of Retention shows the likelihood of retention based on participants' responses to questions associated with the dependent variable. Although Table 4 is solely for descriptive purposes, the data collected was used to determine the level of influence each predictor variable had on a new teachers' decision to remain in the teaching profession, the likelihood of retention. In addition, Table 4 provides the mean and standard deviation for each continuous variable.

Table 3

*Ranges for Factors Impacting Retention Decisions of Secondary Teachers with 0-5 Years' Experience Total and Variable Composite Scores and Mean Scale Score Characterization*

		Level of Influence			
Scale Items	Scale Ranges	Low	Moderate	Strong	
Teacher Preparation Experiences (1a – 1j)	10-50	10-24	25-39	40-50	
Collegial Support (2a – 2h)	7-35	7-18	19-30	30-40	
Principal Support (3a – 3k)	11-55	11-26	27-41	42-55	

		Level of Retention			
Scale Items	Scale Ranges	Extremely Unlikely	Unlikely	Likely	Extremely Likely
Likelihood of Retention (7a – 7d)	4-40	4-10	11-20	21-30	31-40

Table 4

*Means and Standard Deviations for the Three Continuous Variables (N=184)*

Variable	<i>M</i>	<i>SD</i>
Teacher Preparation Experiences	34.0	6.63
Collegial Support	29.8	3.69
Principal Support	40.5	8.15

For this study, Table 5 shows the mean, standard deviation and includes the established response ranges for each construct. The data collection tool was designed to measure the influence that specific non-pecuniary factors have on new teachers' decisions to remain in the teaching profession beyond 5 years. For questions 1a-1j ( $M=34$ ,  $SD=6.63$ ), 71.9% ( $N=123$ ) of responses indicated that teacher preparation experiences had a moderate influence on their decision to remain in the teaching profession. A strong influence was reported by 28% ( $N=48$ ). No participants reported a low level of influence. For questions 2a-2h ( $M=29.8$ ,  $SD=3.69$ ) 41% ( $N=70$ ) of responses indicated that collegial support had a moderate influence on their retention decision, and 58% ( $N=58.3$ ) responded that collegial support had a strong influence. No



participants reported a low level of influence. For questions 3a-3k ( $M=40.5$ ,  $SD=8.15$ ), 43% ( $N=81$ ) of responses indicated that principal support had a moderate influence on their decision to remain in teaching, and 48.6% ( $N=85$ ) reported a strong influence. For the overall satisfaction composite ( $M=25.9$ ,  $SD=8.06$ ), scores were more evenly distributed between the three levels of “Somewhat dissatisfied” (23.5%), “Somewhat satisfied” (40.4%) and “Highly satisfied” (48.6%).

Table 5

*Construct Variables Scale Score Means, Standard Deviations, Frequencies, and Percentages Presented with Response Ranges.*

	Response Ranges – Influence								
	<i>M</i>	<i>SD</i>	Low		Moderate		Strong		
			N	%	N	%	N	%	
Teacher Preparation Experiences	34.0	6.63	-	-	123	71.9%	48	28.1%	
Collegial Support	29.8	3.69	-	-	70	41.7%	98	58.3%	
Principal Support	40.5	8.15	9	5.1%	81	46.3%	85	48.6%	

	Response Ranges – Retention Level									
	<i>M</i>	<i>SD</i>	Very Dissatisfied		Somewhat Dissatisfied		Somewhat Satisfied		Very Satisfied	
			N	%	N	%	N	%	N	%
Level of Satisfaction	25.9	8.06	5	2.7%	43	23.5	74	40.4%	61	33.3%
as an indicator of retention										

*Note. The following is the list of missing data: teacher preparation experiences = 13; collegial support = 16; principal support = 9; and, retention level = 1.*

## ANOVA

**Research question 1: What differences exist in new teacher retention based on teacher preparation experiences?** To determine whether significant differences existed among mean total scale scores based upon the levels of the three independent variables, a separate one-way ANOVA was conducted for each independent variable. As noted in Table 5, there were

three levels for the construct of teacher preparation experiences, low influence, moderate influence and strong influence. The ANOVA analysis allowed for the comparison of the levels of the means to calculate whether or not the individual variables were related to the dependent variable, overall satisfaction, by using the F-test for statistical significance and the measure of effect size. Since low influence had zero responses, only two levels, moderate influence and strong influence, were analyzed. Table 7 shows the results.

Table 6

*Summary of 1 x 3 ANOVA for Teacher Preparation Experiences on New Teacher Retention*

Source	Sum of Squares	df	Mean Square	F	p	D
Between Groups	.580	1	.580	.009	.992	.002
Within Groups	1096044.126	168	6524.072			
Total	1096044.706	169				

\* $p < 0.05$

An alpha level of .05 was used for all statistical tests and partial eta squared was calculated as the effect size. The analysis was not significant,  $F(1 \text{ between groups}, 168 \text{ within groups}) = .009$  statistic,  $p > .05$  ( $p = .992$ ). Both moderate and strong teacher preparation experiences influence had a mean score of 257. Results indicate that teacher preparation experiences do not significantly influence a new teacher's decision to remain in the teaching profession. For teacher preparation experiences, the null hypothesis is accepted. There are no differences in new teacher retention decisions based on teacher preparation experiences.

**Research question 2: What differences exist in new teacher retention based on collegial support?** To determine whether significant differences existed among mean total scale scores of the three independent variables, a separate one-way ANOVA was conducted for each independent variable. As noted in Table 5, there were three levels for the construct of collegial support, low influence, moderate influence and strong influence. The ANOVA analysis allowed for the comparison of the means of the levels to calculate whether or not the individual variables were related to the dependent variable, new teacher retention, by using the F-test for statistical significance and the measure of effect size. Since low influence had zero responses, only two levels, moderate influence and strong influence, were analyzed. Table 7 shows the results.

Table 7

*Summary of 1 x 3 ANOVA for Collegial Support on New Teacher Retention*

Source	Sum of Squares	df	Mean Square	F	p	D
Between Groups	81268.639	1	81268.639	13.322*	.000	.570
Within Groups	1012671.837	166	6100.433			
Total	1093940.476	167				

\* $p < 0.05$

An alpha level of .05 was used for all statistical tests and partial eta squared was calculated as the effect size. The analysis was statistically significant,  $F(1 \text{ between groups, } 166 \text{ within groups}) = 13.322, p < .05$  ( $p = .000$ ). The effect size,  $d = .570$ , is a medium effect size showing that the results are not due to chance. Post hoc analyses were not run because there were only two levels, moderate and strong influence. Strong collegial support influence had a higher mean ( $M = 276.33$ ) score than moderate collegial support influence ( $M = 231.71$ ). Results indicate that collegial support does have a statistically significant influence on a new teacher's decision to remain in the teaching profession. The null hypothesis for collegial support is rejected. There are differences in new teacher retention decisions based on teacher preparation experiences.

**Research question 3: What differences exist in new teacher retention based on principal support?** To determine whether significant differences existed among mean total scale scores of the three independent variables, a separate one-way ANOVA was conducted for each variable. As noted in Table 5, there were three levels for the construct of principal support, low influence, moderate influence and strong influence. The ANOVA analysis allowed for comparison of the levels of the means to calculate whether or not the individual variables were related to the dependent variable, new teacher retention, by using the F-test for statistical significance and the measure of effect size. Table 8 shows the results.

Table 8

*Summary of 1 x 3 ANOVA for Principal Support on New Teacher Retention*

Source	Sum of Squares	df	Mean Square	F	p	D
Between Groups	158358.829	2	79179.415	13.736*	.000	.933
Within Groups	985694.044	171	5764.293			
Total	1144052.874	173				

\* $p < 0.05$

An alpha level of .05 was used for all statistical tests and partial eta squared was calculated as the effect size. The analysis was statistically significant,  $F(2 \text{ between groups}, 171 \text{ within groups}) = 13.736, p < .05$  ( $p = .000$ ). The effect size,  $d = .933$ , is a large effect size showing that the results are not due to chance. Strong principal support influence had a higher mean ( $M=286.24$ ) score than either moderate principal support influence ( $M=239.88$ ) or low principal support influence ( $M=173.33$ ). Results indicate that principal support has a statistically significant influence on a new teacher's decision to remain in the profession. The Bonferroni technique, an after-the-fact post hoc test, was conducted to better determine where significant differences existed in the groups. "The Bonferroni correction is used to reduce the chances of obtaining type I errors when multiple pair wise tests are performed on a single set of data" (Napierala, 2012, p. 1). The Bonferroni technique analyses are shown in Table 9.

Table 9

*Bonferroni Comparison for Variable Principal Support on New Teacher Retention*

Comparisons	Mean Difference	Std. Error	95% CI	
			Lower Bound	Upper Bound
Low influence vs. Moderate influence	-66.542*	26.693	-131.08	-2.00
Low influence vs. Strong influence	-112.902*	26.614	-177.25	-48.56
Moderate influence vs. Strong influence	-46.360*	11.827	-74.95	-17.77

\*  $p < 0.05$

For the Bonferroni comparison, there were three categories, with a total of 3 possible pair-wise comparisons. The results show that each comparison was statistically significant: low influence

vs. moderate influence,  $p=.041$ ; low influence vs. strong influence,  $p=.000$ ; and, moderate influence vs. strong influence,  $p=.000$ .

The null hypothesis for principal support is rejected. There are differences in new teacher retention decisions based on principal support.

### Factorial ANOVA

As an extension of the ANOVA, a factorial analysis of variance (ANOVA) was calculated on new teacher retention using a combination of teacher preparation experiences, collegial support and principal support. An alpha level of .05 was used for all statistical tests. None of combinations were statistically significant. Table 10 shows the results of the factorial ANOVA analysis evaluating the effect of the interaction of the three independent variables on new teacher retention.

Table 10

*Summary of Factorial ANOVA for Combination of Teacher Preparation Experiences, Collegial Support and Principal Support on New Teacher Retention*

Source	Sum of Squares	df	Mean Square	F	P
Teacher Preparation Experiences and Collegial Support	17076.81	1	17076.815	2.919	.090
Teacher Preparation Experiences and Principal Support	8791.32	2	4395.662	.751	.474
Collegial Support and Principal Support	10166.07	2	5083.034	.869	.422
Teacher Preparation Experiences, Collegial Support and Principal Support	9154.49	1	9154.490	1.565	.213

\* $p < 0.05$

## Factorial ANCOVA

A factorial analysis of covariance (ANCOVA) was conducted as an extension of the factorial ANOVA to determine if the addition of gender, age range, and career switcher status as covariates to the three independent variables of teacher preparation experiences, collegial support, and principal support would contribute to better predictions of new teacher retention. Although the three controlled variables were not a part of the primary research, the researcher viewed them to potentially have influence on the independent variable. Table 11 illustrates the results of the factorial ANCOVA. For the categorical variables of gender and career switcher, participants were provided two response options. For gender, the response options were male or female, and for career switcher, participants responded yes or no to the question, “Is teaching your first career?” For the variable of age, participants were grouped into the following ranges by the researcher: (20-29), (30-39), (40-49), (50-59), and (60+).

Table 11

### *Factorial Analysis of Covariance Summary Using Gender, Age Range and Career Switcher*

Source	Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Gender	93.881	1	93.881	.016	.899	.000
Age Range	239.361	1	239.361	.041	.840	.000
Career Switcher	5894.945	1	5894.945	1.014	.316	.008

\*p < 0.05

A preliminary analysis indicated that the relationship between the covariates and the dependent variable did not differ significantly. Follow-up tests were conducted to evaluate pairwise differences among the three independent variables. The results were consistent with the factorial ANOVA showing statistically significant differences between collegial support on new teacher retention (Table 7) and principal support on new teacher retention (Table 8). The covariates did not change the outcomes for any of the three independent variables or the combination of variables on new teacher retention.

## Multiple Regression

To examine the effect of more than one independent variable on the depended variable, a multiple regression was conducted to further explore the relationship between the independent variables and the dependent variable by determining the predictive ability of the independent variables. The following three variables were entered: teacher preparation experiences, collegial support and principal support. The criterion was the composite measure of teacher satisfaction used as determinant of new teacher retention. The results are presented in Table 12.

Table 12

*Multiple Regression Coefficients Based on Predictors of New Teacher Retention*

Predictor Variable	<i>B</i> Coefficients	<i>Beta</i> Coefficients	R	$R^2$	Adjusted $R^2$
Teacher Preparation Experiences	4.002	.327			
Collegial Support	1.030	.046			
Principal Support	3.110	.319			
Model			.544	.296	.282

Regression results indicate an overall model that significantly predicts new teacher retention,  $R = .544$ ,  $R^2 = .296$ ,  $F(3, 146) = 20.460$ ,  $p < .05$  ( $p = .000$ ). This model accounted for 29.6% variance in new teacher retention.

## Summary

The purpose of this study was to explore the level of influence the three factors listed below have on a new teacher's satisfaction as an indicator of the decision to remain in the profession and the strength of the association.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

Chapter 4 provided a brief description of the study, the three research questions, the null hypotheses, and the hypotheses for the study. It presented descriptive data from the *Factors Impacting Retention Decisions of Secondary Teachers with 0-5 Years' Experience* survey. Each research question was answered by examining the results of a separate one-way ANOVA that determined whether significant differences existed between the means of each independent variable. A factorial ANOVA and a multiple regression analysis were also conducted. ANOVA and regression are two methods used to analyze the behavior of one variable compared to another. Results of the data analysis lead to rejection of the null hypothesis for both collegial and principal support. Both were determined to have a statistically significant influence on a new teacher's decision to remain in the teaching profession. The null hypothesis for teacher preparation experiences was not rejected; this variable was not found to be statistically significant in new teacher retention. In addition, a factorial ANCOVA was conducted to determine if the addition of gender, age range, and career switcher status as covariates would contribute to better predictions of new teacher retention. The covariates did not change the outcomes for any of the three independent variables or the combination of variables on new teacher retention.

A summary of findings and conclusions based on results found in this chapter, will be reviewed in chapter 5. In addition, chapter 5 also discusses implications of this study and recommendations for future research.



## Chapter 5

### Findings

This chapter reviews the purpose and methodology for the research study and further elaborates upon the findings identified in Chapter 4. Implications for practice and suggestions for future studies are also discussed in chapter 5. The chapter is divided into the following sections: (a) introduction, (b) summary of findings, (c) implications for future practice, and (d) recommendations for future studies.

The purpose of this study was to explore the level of influence the three factors listed below have on a new teacher's decision to remain in the teaching profession.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

All participants in the study were employed by one school district in central Virginia. Three hundred and thirty-three teachers with 1-5 years' experience were invited to participate with a 54.28% (N=184) response rate.

The research questions asked in the study were: *(1) What differences exist in new teacher retention based on teacher preparation experience? (2) What differences exist in new teacher retention based on collegial support? (3) What differences exist in new teacher retention based on principal support?*

### Summary of Findings

**Finding 1. Teacher preparation experiences did not significantly influence a new teacher's decision to remain in the teaching profession.**

Teachers were asked a series of 10 questions that focused on teacher preparation experiences and the impact these experiences had on their decision to remain in the teaching profession. A total of 151 responses were recorded for this research question with 71.9% (N=123) responding that teacher preparation experiences had a moderate impact on retention, and 28% (N=48) reporting a strong impact. No teachers responded that teacher preparation experiences had a low impact on their retention decision. The results of the ANOVA, as shown in Table 6, found a significance level of .992 ( $p > .05$ ,  $p = .992$ ) indicating that teacher

preparation experiences did not significantly influence a new teacher's decision to remain in the teaching profession.

Ingersoll et al. (2012) in their study of how preparation matters for new math and science teachers, found that type of college, degree, and preparation route had little predictability on new teacher retention. However, their research did find that pedagogy was strongly related to retention. "Beginning teachers who had taken more courses in teaching methods and strategies, learning theory or child psychology, or materials selection were significantly less likely to depart" (p.33). Additionally, but in contradiction, Darling-Hammond (2003) presented evidence supporting that teachers who lack adequate preparation are more likely to leave the profession when compared to those who feel they have the skill set necessary to be successful.

**Finding 2. Higher levels of collegial support have a statistically significant influence on new teachers' decisions to remain in the teaching profession.**

Study participants were asked a series of 8 questions that focused on collegial support and the impact that support had on their decision to remain in the teaching profession. A total of 168 responses were recorded for this research question with 41.7% (N=98) responding that teacher preparation experiences had a moderate impact on retention, and 58.3% (N=98) reporting a strong impact. No teachers responded that collegial support had a low impact on their retention decision. The results of the ANOVA, as shown in Table 7, found a significance level of .000 ( $p < .05$ ,  $p = .000$ ) indicating that collegial support significantly influences a new teacher's decision to remain in the teaching profession. Peck's study (2002) also found that a new teacher's intention to leave or stay in the profession was influenced by the school environment. Teachers in Peck's indicated that colleagues made them feel welcome in their new positions.

Nahal's (2009) study provided evidence that collegial relationships impact new teacher retention. Nahal found that "collaboration and support from veteran colleagues enabled first year teachers to endure a sense of acceptance as a member of the learning community" (p.7). Nahal also concluded that, "A strong social support network may contribute to higher levels of job satisfaction and self-efficacy, less feelings of stress, and higher retention rates" (p. 7).

**Finding 3. Supportive principals have a statistically significant influence on new teachers' decisions to remain in the teaching professions.**

A total of 175 responses were recorded for this research question with 5.1% (N=9) responding that principal support had a low impact on retention, 46.3% (N=85) reporting a

moderate impact, and 48.6% (N=85) reporting a strong impact. The results of the ANOVA, as shown in Table 8, found a significance level of .000 ( $p < .05$ ,  $p = .000$ ) indicating that principal support has a statistically significant influence on a new teacher's decision to remain in the teaching profession. A large effect size,  $d = .933$ , showed that the results were not due to chance. The findings in this study are consistent with those found in Peck's study (2002). Peck found that "the degree of rapport with the principal and the extent to which the new teachers felt supported by the administration in their schools did significantly influence their satisfaction and their decision to stay in their respective schools and the teaching profession" (p. 76).

Boyd et al. (2011) found in their survey of 4,360 first year teachers in New York City, that administrative support was the only factor of the six conceptual factors studied, that was statistically significant in predicting new teacher retention. In their two follow-up surveys completed by the same sample of teachers, administrative support was identified as the primary factor in new teacher retention. "Teachers who have less positive perceptions of their school administrators are more likely to transfer to another school and to leave teaching..." (p. 323).

#### **Finding 4. New teachers are satisfied with the teaching profession.**

The dependent variable for this study was an overall teacher satisfaction composite used as a determinant of new teacher retention. The satisfaction composite was established based upon participants' responses to four questions used to measure overall job satisfaction. Teachers (N=184) were asked to record the intensity of their responses on a 100-point continuum. Nearly 75% (N=135) of new teachers were found to have some level of satisfaction with the teaching profession. As shown in table 5, 40.4% (N=74) of participants were found to be "somewhat satisfied" with the teaching profession, and 33.3% (N=61) were found to be "highly satisfied". Of the remaining respondents, 26.2% (N=48) were found to be dissatisfied with the teaching profession, and only 2.7% (N=5) were found to be "very dissatisfied".

Recognizing that the premise for this research study was that teachers who are satisfied with teaching have a higher likelihood of remaining in the teaching profession, 73.7% (N=135) of participants in this study have a high likelihood of remaining in the teaching profession. Results from this study are consistent with those from Peck's study (2002). Peck also reported overall job satisfaction from participants with 83% of teachers being found to have some level of job satisfaction. Teachers who are satisfied in their jobs are more likely to remain in the teaching profession (Halstead, 2013; Henke et al., 1997; Peck, 2002; Weiqi, 2007). Based on the

percentage of new teachers this study who were found to have some level of dissatisfaction, 26.2% (N=48) may choose to leave the profession entirely. Although this percentage is lower than the national average 40-50%, losing 26.2% of new teachers can be costly both financially and academically for a school district. New teacher attrition has grown by 50% over the last 15 years and it costs just over \$7 billion a year to hire and train new teachers (NCTAF, 2007). In addition, research shows that student achievement is higher in classrooms with experienced teachers (Clodfelter et al., 2007; Darling-Hammond, Wei, & Johnson, 2009; Darling-Hammond, 2010).

**Finding 5. Gender, age, and career switcher status did not contribute to predictions of new teacher retention decisions in relation to teacher preparation experiences, collegial support, and principal support.**

A factorial ANCOVA was conducted to determine if gender, age, and career switcher status would contribute to better predictions of new teacher retention. The three controlled variables were not a part of the primary research, but they were viewed to potentially have influence on the independent variable. The results of the factorial ANCOVA as shown in Table 11 are consistent with the results of the factorial ANOVA. The covariates of gender ( $p=.899$ ), age ( $p=.840$ ), and career switcher status ( $p=.316$ ) did not change the outcomes for any of the three independent variables or the combination of variables on new teacher retention.

When researching age and gender as predictor variables, Dr. Benjamin Scafidi (2010) found in his study of retention rates in Georgia Public Schools, that teachers under the age of 26 at the start of their career had lower retention rates than other new teachers which included career switchers. Scafidi also found higher retention rates for nonwhite teachers and male teachers than for white, female teachers.

**Implications for practice**

The implications for practice in this study were found to be intertwined identifying the principal as the common component necessary for change. Teacher satisfaction encompasses a multitude of factors at the school level. The principal is ultimately responsible for all aspects of leadership including change for the purpose of greater teacher satisfaction resulting in higher retention rates.

**School divisions should focus on supporting new teachers through practical experiences that are difficult to replicate during the preparatory period.** Teacher preparation experiences were not found to be a statically significant factor in a new teacher's decision to remain in the profession. New teachers need guidance in understanding procedures and expectations for their new position, especially during the first few months. New teachers' who responded to Mandel's (2006) survey, conveyed that support from veteran teachers was needed in the following areas: (a) preparing for the first week of school including classroom set-up, (b) covering the required curriculum while maintaining student interest, (c) grading fairly, (d) working with parents, and (e) maintaining personal sanity. The practical experiences identified by Mandel, are difficult to replicate during the preparation period. New teachers enter the profession with limited practical experience and their needs differ markedly from those of veteran teachers.

**School leaders should provide a network of collegial support for new teachers.** School divisions often focus on extrinsic rewards such as salary to entice and retain highly qualified teachers. This study focuses on non-pecuniary factors to retain new teachers that can be managed at the school level. Collegial support was found to be a statistically significant factor in retaining new teachers. This support moves beyond the role of one mentor assigned to guide a new teacher through the first few years of teaching. New teachers require a strong support network of colleagues who understand the skills and resilience needed to thrive during their first year of teaching (Nahal, 2009). New teachers enter the profession armed with knowledge and enthusiasm, unfortunately, they quickly realize they are lacking the practical experiences which allow them to function efficiently. They need to be able to reach out to trusted colleagues to better understand the day-to-day expectations beyond classroom teaching. New teachers often fall into the trap of they don't know what they don't know.

**Principals should provide time for direct communication with new teachers.** Principal support was also found to have a statistically significant impact on a new teacher's decision to remain in the teaching profession. The role of the principal, the instructional leader in the school, has evolved over recent years. Shifting from the mindset of what was once considered primarily a managerial position to that of an instructional leader requires additional skill sets, roles, and responsibilities. Responsibilities include creating a positive school culture

where teachers feel supported and valued. Teachers need a positive environment and a positive school culture to thrive, and this positivity begins with the principal (Borsuk, 2010).

In addition to a positive school culture, new teachers need principals who are visible and who provide feedback to help them improve their professional practice. One characteristic of the Gen Y generation as discussed earlier in the study, was they want to know how they are doing, they want this feedback regularly, and they want it in real time. Not only do they want face time with their supervisor, they expect it (Coley, 2009). Ingersoll et al. (2012) reported similar findings in that the amount of feedback a new teacher receives a critical factor in whether a new teacher decides to remain in the profession. Principals who regularly meet with and observe new teachers are often able to identify a struggling teacher early in the process and provide additional supports as needed. As discussed in the study, student achievement can be linked to years' experience of the teacher (Clodfelter et al., 2007). A principal recognizes the skills necessary for a teacher to be successful and should strive to hone the skills that not only lead to teacher satisfaction, but also the ultimate goal of student achievement.

The principal's role in the success of a new teacher reaches beyond their direct communication with the new teacher. It is the principal's responsibility to ensure that a new teacher has the opportunity to work and share in a collaborative environment as previously discussed. In addition, it is ultimately the principal's responsibility to ensure that a new teacher has a thorough understanding of policies, guidelines, and expectations. While new teachers require support from all areas within a school, they look to principals to ensure support for mentoring, to encourage collegial support, and to ensure ongoing induction programs that will help them grow and want to remain in the profession (Ingersoll & Smith, 2003).

**School administrators should be knowledgeable in types of supports that lead to teacher satisfaction resulting in higher levels of retention.** New teachers enter the profession energized with new ideas, technology skills, and an arsenal of research-based instructional strategies. They need a forum to share ideas and to participate in positive collaboration with colleagues, which may result in a higher confidence level and the feeling of being a valued team member. Encouraging collaboration and providing time for collaboration to occur may prevent a new teacher from the feeling of isolation or from experiencing what Ingersoll (2003) defined as a "sink or swim" experience of a first year teacher. New teachers need assistance integrating theory into practice which includes the practical application of instructional strategies to meet the

diverse of all students. New teachers should be relieved of ancillary duties when possible to allow them more time to focus on meeting the needs of their students and to collaborate with colleagues. In addition, it should not be a rite of passage for new teachers to be assigned the most difficult classes and/or the most challenging students. Patterson (2005) reported that of the 60 new teachers she supported in the BTSA program, those who left the profession, left because they believed they were in impossible situations in which they would never experience success or career satisfaction” (p. 21).

**School leaders should understand that all new teachers, regardless of gender, age, and career switcher status, require support from their principal and colleagues to elect to remain in the teaching profession.** In this study, gender, age, and career switcher status did not contribute to better predictions of new teacher retention decisions when added as covariates to the three independent variables. According to this finding, school divisions cannot generalize a population, based on the variables of gender, age, and career switcher status, to predict which group would need the greatest level of support or have the greatest likelihood of remaining in the teaching profession. It is important to note that for this study the three variables were analyzed as covariates, Sacfidi’s (2010) study found that teachers under the age of 26 at the start of their career had lower retention rates than other teachers. In addition, Scafidi found retention rate differences based on a combination of gender and race.

### **Suggestions for Further Study**

During the completion of this study, several possibilities for additional research emerged. It is important to note that limitations and delimitations for this study as discussed in Chapter 1, served as the initial source for suggesting future research opportunities. Future studies offer the prospect of expanding upon previous research and therefore, providing additional insight to retaining new teachers beyond the first 5 years. The following recommendations are suggested for future study.

1. This study was limited to secondary teachers in one school district with varying school demographics. Research that focuses on specific demographics such as socioeconomic status of students would be helpful for school districts in providing targeted supports based on individual school needs.

2. Research that includes participants from several school districts with similar demographics, both within a state and beyond state borders should be pursued. A larger data sample would provide a broader range of teacher perceptions and verify the findings of this research on a larger scale. In addition, by expanding research to include more than one school district, the concern of subject effect validity is reduced. Participation from multiple districts lessens the risk of participants feeling they could be identified by their responses, therefore resulting in more honest responses.
3. This study was limited to secondary teachers. A study should be conducted on K-6 teachers and their perception of the factors that most significantly impact a new teacher's decision to remain in the teaching profession to determine if factors that impact satisfaction/retention vary by school level.
4. A study that collects data at the end of the school year may be more beneficial at predicting new teacher attrition. Research conducted at the end of a school year, reflects a teacher's perceptions after the decision has been made to stay or to leave the teaching profession.
5. A study could be conducted that expands upon the research model used in this study. Based upon the adjusted R squared of the combined model, only 29.6% of the decision to remain in the teaching profession is explained by the variation of the values of the independent variables. Identifying additional variables that impact a new teacher's decision to remain in the teaching profession may lead to a high rate of new teacher retention.
6. A study could be conducted that explores the impact each of the three covariates from this study, age, gender, and career switcher status, has on new teacher retention. For the future study, these three factors would serve as the independent variables and the likelihood of retention would serve as the dependent variable.

## **Reflections**

Conducting a research study was anticipated to be a daunting process, and while it was somewhat arduous, support from faculty members, committee members, and Dr. Peck, the author of the research from which this study was modeled, was appreciated and inspiring. The plan of



study developed by Virginia Polytechnic Institute provided a pacing timeline that was manageable and, the survey tool made available to the researcher ensured confidentiality in the data collection process.

Few obstacles were encountered during the study with the greatest being the slow response time of survey participants and lower than expected response rates. At the conclusion of the data collection period, only 52% of new teachers invited to participate in the study had completed the research survey. A low response rate may lead a reader to question if findings are truly representative of the population as a whole. In this study, the 52% response rate indicated a nonresponse bias of 48%, which may be even less convincing to a reader. In recent discussions with faculty members, low response rates for small scale surveys are a growing concern. For this reason, it may be advantageous for dissertation related research to be conducted using qualitative or mixed methods studies, or if quantitative is the preferred method of research, relying on existing data may result in more conclusive results.

As an educational specialist who works closely with new teachers with 0-2 years' experience, and as a former administrator with over 12 years' experience, it is gratifying that findings such as the ones in this study may be beneficial in providing school district a better understanding of the supports needed for new teachers to remain in the teaching profession. Results from the study show that teachers need a variety of supports beyond one-to-one mentoring to feel confident and knowledgeable during their first few months of teaching. New teacher attrition has been a concern in the United States since the early 1980s, and studies such as this one will continue to keep the issue in the forefront of research until the concern is reduced or eliminated.

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## Appendix A

### Permission to Model Peck's Study

**From:** Brad Peck [mailto:bpeck@wausauschools.org]  
**Sent:** Tuesday, September 30, 2014 10:39 AM  
**To:** Tracie A. Weston (taweston)  
**Subject:** Re: Dissertation Approval

Good Morning, Tracie!

I hope your new school year is off to a great start! I am literally buried in preparation for the ACT/Aspire, WKCE and new ACT/ACT WorkKeys exams. I hope you are staying ahead of the proverbial wave, too!

Thanks for sharing your overview and survey questions. I am very impressed with your survey questions, Tracie. Even more, I would be highly interested in seeing the results of your study. This is my 19th year as a high school principal. I've done some part-time teaching for a university in different areas of educational administration; however, it is still my dream to someday teach full-time at a college and focus my research on teacher retention.

Please feel free to use my study in your research. You have my unconditional permission to use it as you see fit in your study.

Now, some advice....Writing your dissertation can be summed up in the following: It will be you versus yourself :) Make the time to get it done. However, don't put "living" on a shelf. Make sure you find time for your family. Yes, you will suffer from sleep deprivation - but keep the end in mind. You will make it. Finally, when you complete your study and you are ready to defend your dissertation, remember that you are the expert in that room. You will know more about your topic than anyone else in attendance. Shine! Prove to them that you are the expert!

You can do it, Tracie!

Best wishes! I'm only an email away if you need assistance!

Take care!

Brad Peck, Ph.D.  
Principal  
Wausau East High School

**Appendix B**  
**Factors Impacting Retention Decisions of Secondary Teachers with 0-5 Years' Experience**  
**Research Survey**

Directions: This survey is designed to measure the influence that specific non-pecuniary factors have on new teachers' decisions to remain in the teaching profession beyond 5 years. Please read each item carefully and select the response that best reflects how true the statement is of you. You may only select one response for each item.

Statements 1a-j, are specific to the Teacher preparation experiences of teachers with 0-5 years' experience.

**1a. My university training adequately prepared me to teach the subjects I am currently teaching.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1b. I was adequately prepared to meet the needs of English Language Learners.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1c. I was adequately prepared in the areas of Individual Education Plans and 504s.**

Strongly disagree  Disagree  Neither agree or disagree  Agree  Strongly agree

**1d. I was adequately prepared with strategies to differentiate instruction.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1e. I was adequately prepared to handle social issues in the classroom including prejudices and biases.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1f. I was adequately prepared to teach reluctant learners.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1g. I was adequately prepared to manage discipline problems.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1h. I was adequately prepared to manage the paperwork associated with teaching.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1i. My student teaching experience exposed me to challenges similar to those in the first year of teaching.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**1j. My student teaching experience was positive.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

Statements 2a-j, are specific to collegial relationships of teachers with 0-5 years' experience.

**2a. I am respected among my colleagues.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2b. Colleagues respect and value my opinion.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2c. Colleagues frequently ask how I am doing or how they can help.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2d. Colleagues are willing to share instructional resources.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2e. Colleagues invite me to participate to collaborate in planning lessons.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2f. I lack support from colleagues.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2g. I receive formal or informal recognition from my colleagues.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2h. I can share professional concerns with at least one colleague.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2i. I trust my colleagues.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**2j. I am invited to socialize with colleagues outside the school day.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

Statements 3a-n, are specific to principal support of teachers with 0-5 years' experience.

**3a. My principal informs me about district policies.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3b. My principal is fair and honest with teachers.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3c. My principal supports me with student discipline issues.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3d. I am comfortable talking to my principal about job- related concerns.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3e. My principal encourages teachers to provide input regarding school initiatives.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3f. My principal has a clearly defined vision.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3g. My principal respects my opinion on curriculum development.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3h. My principal has high performance expectations for teachers.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3i. My principal inspires me to reach my full professional potential.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3j. My principal often visits my classroom.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3k. My principal models behavior consistent with the values of the school.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3l. My principal recognizes teacher accomplishments formally or informally.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3m. My principal encourages collaboration among staff members.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

**3n. My principal demonstrates a personal interest in my professional well-being.**

Strongly disagree  Disagree  Neither agree nor disagree  Agree  Strongly agree

For statements 4a-c, rank the statements in order of influence on the satisfaction level of the teaching profession.

1=the most influential

2=the second most influential

3=the least influential

**4a. Preparation programs and practical experiences**

The most influential  The second most influential  The least influential

**4b. Collegial relationships with other teachers**

The most influential  The second most influential  The least influential

**4c. Support from the principal**

The most influential  The second most influential  The least influential

Statements 5a-j, are specific to the work assignment of teachers with 0-5 years' experience.

**5a. I have unencumbered planning time each day.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5b. I have shared planning time with colleagues at least two times per week.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5c. The size of my classes limits my instructional effectiveness.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5d. I am assigned to teach all lower level classes.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5e. Lower level classes are assigned equally between teachers in my department.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5f. I requested the classes I am currently teaching.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5g. I am satisfied with the classes I am currently teaching.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5h. Students with low academic ability are often assigned to my classes.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5i. Students with discipline problems are often assigned to my classes.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

**5j. My teaching load is reasonable in terms of the range of student disabilities that I serve.**

Strongly Agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree

For statements 6a-j, rate the degree to which the listed concerns are perceived as obstacles to the teaching profession.

**6a. Pressure associated with Teacher Evaluation Programs based on Student Growth Measures**

Never a problem  Small problem  Moderate problem  Serious problem

**6b. Pressure associated with school accreditation status**

Never a problem  Small problem  Moderate problem  Serious problem

**6c. Lack of visibility and support from the principal**

Never a problem  Small problem  Moderate problem  Serious problem

**6d. Lack of support and inclusion from colleagues**

Never a problem  Small problem  Moderate problem  Serious problem

**6e. Lack of parental support**

Never a problem  Small problem  Moderate problem  Serious problem



**6f. Lack of collaborative planning time with colleagues**

- Never a problem    Small problem    Moderate problem    Serious problem

**6g. Unmotivated students**

- Never a problem    Small problem    Moderate problem    Serious problem

**6h. Teaching in multiple classrooms throughout the school day**

- Never a problem    Small problem    Moderate problem    Serious problem

**6i. Ancillary duties during the school day including, but not limited to fee collections, bus duty, cafeteria duty, etc...**

- Never a problem    Small problem    Moderate problem    Serious problem

**6j. Inadequate recognition**

- Never a problem    Small problem    Moderate problem    Serious problem

For questions 7a-d, rank your answers on a scale of 10-100. 10 represents the lowest end of the scale and 100 represents the highest end of the scale.

**7a. Based on your personal experiences, please indicate to what degree you would recommend a qualified student to pursue a career in teaching.**

- 10    20    30    40    50    60    70    80    90    100

**7b. Within the next five years, how likely is it that you will leave the teaching profession to go into a different occupation?**

- 10    20    30    40    50    60    70    80    90    100

**7c. Within the next five years, how likely is it that you will leave your current school to teach somewhere else?**

- 10    20    30    40    50    60    70    80    90    100

**7d. All experiences considered, are you satisfied with you with your job as a teacher?**

- 10    20    30    40    50    60    70    80    90    100

Questions 8a-l, are specific to your experiences and demographic information.

**8a. What is your gender?**

- Female    Male

**8b. Are you a certified teacher?**

- Yes  No

**8c. What is the highest degree you have earned in the field of education?**

- BA or BS  Master's  Post Master's  Doctorate

**8d. What is your age?**

**8e. Is teaching your first career?**

- Yes  No

**8f. Did you student teach before obtaining your first teaching job?**

- Yes  No

**8g. How long was your student teaching experience? (number of weeks)**

**8h. Did you have a positive student teaching experience?**

- Yes  No

**8i. Were you assigned a mentor during your first year of teaching?**

- Yes  No

**8j. Did your mentor provide the level of support you needed during your first year?**

- Yes  No

**8k. Are you assigned to teach in one classroom?**

- Yes  No

## Appendix C

### Permission from the Selected School District

10/2/2014

[REDACTED]

[REDACTED]

The Department of Research and Planning has reviewed and approved your research study entitled "Factors impacting the retention of secondary teachers". Your study was approved by the review committee with the following revisions and/or conditions:

- The email invite, research study cover letter and survey link will be sent by Research and Planning.
- The Research study cover letter needs to have a due date added.
- The Research Committee believes that the survey is too long – 72 questions. We suggest that you look at your research questions and only ask those questions that pertain to the research questions. If the teacher sees the length of the survey, they will not take it. We would like you to remove the optional question (8k). Since all reports generated from this study should not identify the schools or the county, you do not need this question.

Approval to conduct the study is limited to one year from the time of proposal submission. If the research timeline or any other aspect of your study changes during the time frame, please contact [REDACTED] and submit the changes for review prior to proceeding. If you are affiliated with an organization with an Institutional Review Board (IRB), the IRB approval letter must be on file in our office prior to beginning the study. Although your study has been approved, participation by individuals and schools is completely voluntary. Reports and publications generated from this study should not identify the individuals, schools, or the division and all research materials should accurately represent the party conducting the study. It is our expectation that you will submit a final report upon completion of the study to the Department of Research and Planning.

Please contact [REDACTED] or [REDACTED] who will assist you in the process of beginning your research studies in the schools or offices that you have requested.

Thank you for your interest in [REDACTED]

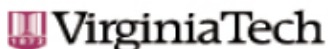
Sincerely,

[REDACTED]

[REDACTED]

## Appendix D

### IRB Approval from Virginia Tech



Office of Research Compliance  
 Institutional Review Board  
 North End Center, Suite 4 120, Virginia Tech  
 300 Turner Street NW  
 Blacksburg, Virginia 24061  
 540/231-4606 Fax 540/231-0959  
 email irb@vt.edu  
 website <http://www.irb.vt.edu>

#### MEMORANDUM

**DATE:** September 25, 2014  
**TO:** Carol S Cash, Tracie Amos Weston  
**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)  
**PROTOCOL TITLE:** Factors Impacting the Retention of New Teachers at the Secondary Level  
**IRB NUMBER:** 14-790

Effective September 25, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

#### PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2,4**  
 Protocol Approval Date: **September 25, 2014**  
 Protocol Expiration Date: **N/A**  
 Continuing Review Due Date\*: **N/A**

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

#### FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

*Invent the Future*

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY  
*An equal opportunity, affirmative action institution*

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

\* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

**Appendix E**  
**Study Cover Letter**  
**An Invitation to Participate**

November 3, 2014

Dear Teacher:

I am a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University and I am writing to request your participation in my dissertation research study entitled, *Factors Impacting the Retention of Secondary Teachers with 0-5 years' Experience*.

You are invited to participate as a teacher by completing a survey that examines the impact of the following three non-pecuniary factors on a teacher's decision to remain in the teaching profession.

1. Teacher preparation experiences
2. Collegial relationships
3. Principal support

In addition, you will be asked questions that describe you and your experiences in the participant information portion of the survey. All responses are completely confidential and will not be associated with you or your school, nor reported individually.

The total survey will take approximately 15 minutes to complete and it will be administered through a Virginia Polytechnic Institute and State University approved online, electronic survey program. Results will only be reported in summary form. Your participation is very important to this study as it may assist school districts and administrators in providing the support necessary to retain new teachers beyond five years.

Please take a moment to complete this district approved study. Your responses are not only critical for this research, but are important to the district as a whole. The next step in the survey process is to review the attached Informed Consent Form and submit your responses at the link below.

Please click on the link below to begin the survey.  
<https://survey.vt.edu/survey/entry.jsp?id=1411265019028>

Please feel free to contact me with any questions you may have regarding the survey. Thank you in advance for taking your valuable time to participate in this important research study.

Sincerely,  
Tracie A. Weston

Researcher Contact Information:  
Tracie A. Weston  
[tracieaw@vt.edu](mailto:tracieaw@vt.edu)

**Appendix F**  
**Participant Informed Consent Form**

**VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY**  
**Informed Consent for Participants**

Please keep this *Informed Consent Form* for your records.

Research study  
*Factors Impacting the Retention of Secondary Teachers*

Researcher  
Tracie A. Weston  
traciew@vt.edu

The purpose of this study is to explore the level of influence the factors below have on new teacher retention and the strength of association between the factors and new teacher retention.

- 1) Teacher preparation experiences
- 2) Collegial support
- 3) Principal support

By exploring and identifying influential factors, school leaders will be better prepared to support new teachers during their first years in the profession.

**Completion and submission of the online survey implies consent to participate in this study and consent to use the information you provide in aggregate form in the study compilation, presentations, and/or publications.**

**Please take a moment to read the following information as you consider participation in the research survey:**

- Participation in this research study is voluntary.
- The survey will be completed using an online survey program approved by Virginia Polytechnic Institute and State University.
- Completion of the survey will take approximately 10-15 minutes.
- Participants may elect to withdraw from the survey at any time without question or adverse consequences.
- Study participants are limited to one school division in central Virginia.
- A benefit of this study is to assist school districts and school administrators in better understanding the supports needed to retain new teachers beyond 5 years.
- Risks associated with participation in this study are not greater than those ordinarily encountered in daily life. There are no apparent risks, physical or psychological.
- The Data Retention and Sharing Guidelines as defined by the American Psychological Association (2010) will be used to ensure secure electronic and paper data storage.

Thank you in advance for your participation, and please know how important your responses are to the research on *Factors Impacting the Retention of Secondary Teachers*. If you have questions regarding your rights as a research subject, please contact the Virginia Tech Institutional Review Board at [www.irb.vt.edu](http://www.irb.vt.edu).

This is a Virginia Tech IRB approved study.



## Appendix G

### Research Participation Follow-up Email

November 17, 2014

Dear Teacher:

This is a follow-up email requesting your participation in my doctoral research study entitled, *Factors Impacting the Retention of Secondary Teachers with 0-5 years' Experience*. The goal of this study is to identify factors that have the greatest impact on a new teacher's decision to remain in the teaching profession. If you have already completed the survey, please disregard this email and thank you for your valuable participation.

As a teacher with 0-5 years' experience, you are invited to participate by completing a survey that examines the impact of the following three non-pecuniary factors on a new teacher's decision to remain in the teaching profession.

1. Teacher preparation experiences
2. Collegial Relationships
3. Principal Support

In addition, you will be asked questions that describe you and your experiences in the participant information portion of the survey. All responses are completely confidential and will not be associated with you or your school, nor reported individually.

The total survey will take approximately 15 minutes to complete and it will be administered through a Virginia Polytechnic Institute and State University approved online, electronic survey program. Results will only be reported in summary form. Your participation is very important to this study as it may assist school districts and administrators in providing the support necessary to retain new teachers beyond five years.

Please click on the link below to begin the survey.  
<https://survey.vt.edu/survey/entry.jsp?id=1411265019028>

Thank you in advance for taking your valuable time to participate in this important research study. Please feel free to contact me with any questions you may have regarding the survey. .

Sincerely,  
Tracie A. Weston

Researcher Contact Information:  
Tracie A. Weston  
tracieaw@vt.edu

## Appendix H

### Research Participation Final Email

November 24, 2014

Dear Teacher:

This is a final email requesting your participation in my doctoral research study entitled, *Factors Impacting the Retention of Secondary Teachers with 0-5 years' Experience*. The goal of this study is to identify factors that have the greatest impact on a new teacher's decision to remain in the teaching profession. If you have already completed the survey, please disregard this email and thank you for your valuable participation.

As a teacher with 0-5 years' experience, you are invited to participate by completing a survey that examines the impact of the following three non-pecuniary factors on a new teacher's decision to remain in the teaching profession.

1. Teacher preparation experiences
2. Collegial Relationships
3. Principal Support

In addition, you will be asked questions that describe you and your experiences in the participant information portion of the survey. All responses are completely confidential and will not be associated with you or your school, nor reported individually.

The total survey will take approximately 15 minutes to complete and it will be administered through a Virginia Polytechnic Institute and State University approved online, electronic survey program. Results will only be reported in summary form. Your participation is very important to this study as it may assist school districts and administrators in providing the support necessary to retain new teachers beyond five years.

Please click on the link below to begin the survey.  
<https://survey.vt.edu/survey/entry.jsp?id=1411265019028>

Thank you in advance for taking your valuable time to participate in this important research study. Please feel free to contact me with any questions you may have regarding the survey.

Sincerely,  
Tracie A. Weston

Researcher Contact Information:  
Tracie A. Weston  
tracieaw@vt.edu

**Appendix I**  
**Internal Reliability from Peck's Study**

Peck's (2002) Study

*Internal Reliability of Each Construct (p. 60)*

Name of Variable	Alpha
(a) Work assignment	.74
(b) Relationship with other teachers	.85
(c) Administrative support	.94
(d) Educational preparation	.79
(e) School environment	.88
(f) Community atmosphere	.79
(g) Reward	.75

## Appendix J

### Descriptive Statistics for Teacher Preparation Experiences Survey Questions

*Descriptive statistics for teacher preparation experiences survey questions (N=184)*

Characteristic	<i>M</i>	SD
(a) My university training adequately prepared me to teach the subjects I am currently teaching.	3.92	1.082
(b) I was adequately prepared to meet the needs of English Language Learners.	2.84	1.137
(c) I was adequately prepared in the areas of Individual Education Plans and 504s.	3.18	1.202
(d) I was adequately prepared with strategies to differentiate instruction.	3.8	0.945
(e) I was adequately prepared to handle social issues in the classroom including prejudices and biases.	3.52	1.091
(f) I was adequately prepared to teach reluctant learners.	3.15	1.168
(g) I was adequately prepared to manage discipline problems.	3.13	1.104
(h) I was adequately prepared to manage the paperwork associated with teaching.	2.76	1.188
(i) My student teaching experience exposed me to challenges similar to those in the first year of teaching.	3.43	1.277
(j) My student teaching experience was positive.	4.04	0.988
Teacher Preparation and Practical Experience Continuous Variable	34.01	6.625

**Appendix K**  
**Descriptive Statistics for Collegial Support**

*Descriptive statistics for collegial support (N=184)*

Characteristic	<i>M</i>	<i>SD</i>
(a) Colleagues respect and value my opinion.	4.04	0.749
(b) Colleagues frequently ask how I am doing or how they can help.	3.84	1.043
(c) Colleagues are willing to share instructional resources.	4.22	0.865
(d) I lack support from colleagues.	1.9	0.975
(e) I receive formal or informal recognition from my colleagues.	3.65	0.9
(f) I can share professional concerns with at least one colleague.	4.46	0.662
(g) I trust my colleagues.	3.96	0.858
<b>Collegial Support Continuous Variable</b>	<b>29.78</b>	<b>3.694</b>

**Appendix L**  
**Descriptive Statistics for Principal Support**

*Descriptive statistics for principal support (N=184)*

Characteristic	<i>M</i>	<i>SD</i>
(a) My principal informs me about district policies.	3.85	0.868
(b) My principal supports me with student discipline issues.	3.6	0.944
(c) I am comfortable talking to my principal about job- related concerns.	3.44	1.124
(d) My principal has a clearly defined vision.	3.77	0.935
(d) My principal has high performance expectations for teachers.	4.21	0.676
(f) My principal inspires me to reach my full professional potential.	3.63	1.099
(g) My principal often visits my classroom.	2.75	1.185
(h) My principal models behavior consistent with the values of the school.	3.97	0.951
(i) My principal recognizes teacher accomplishments formally or informally.	3.9	1.001
(j) My principal encourages collaboration among staff members.	4.07	0.865
(k) My principal demonstrates a personal interest in my professional well-being.	3.46	1.142
Principal Support Continuous Variable	40.46	8.146

**Appendix M**  
**Training in Human Subjects Protection Certificate**



**Appendix N**  
**Timeline for Research Study**

Research Timeline	Research Collection Tasks
November 3-28	Surveys distributed to invited participants  11.3: email #1 (Appendix H, Appendix I)  11.17 email #2 (Appendix J, Appendix I)  11.24 email #3 (Appendix K, Appendix I)



## Appendix O

### Request to Model Peck's Study

**From:** Tracie A. Weston (taweston)  
**Sent:** Friday, September 26, 2014 2:48 PM  
**To:** 'bpeck@wausau.schools.org'  
**Subject:** Dissertation Approval

Hello Dr. Peck,

It was so nice talking with you in July, and I am excited to share that I have received approval from both my school division and Virginia Tech to proceed with my research study that is modeled after your study. I've attached an overview of my dissertation that credits you and your work. In addition, the overview explains how the studies differ. I've also attached a copy of the survey questions so you can see the changes and additions that were made to accommodate the specific factors in this research. With your blessing, I would like to proceed with data collection in November. Please let me know if you have questions, suggestions, or concerns. If you are still agreeable, please respond to this email granting permission for the use of your research study as a model for my dissertation. I will be happy to share the results with you at the conclusion of the study.

Thank you again, and I hope you are off to a GREAT school year!

Tracie Weston