

THE IMPACT OF TEAMING ON TEACHER ATTRITION
IN MISSOURI MIDDLE SCHOOLS

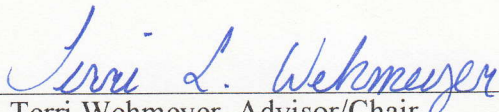
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2018

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THE IMPACT OF TEAMING ON TEACHER ATTRITION
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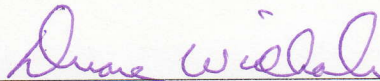
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THE IMPACT OF TEAMING ON TEACHER ATTRITION
IN MISSOURI MIDDLE SCHOOLS

A Dissertation
Presented to
The Faculty of the Graduate Education Department
Southwest Baptist University

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education

By
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ACKNOWLEDGMENTS

Lao Zi wrote, “The journey of a thousand miles begins with a single step.”

I first thank my husband Brent who has been a constant supporter through this journey which *feels* much farther than a thousand miles. He is the love of my life and the sweetest person I know. He does deal with me on a daily basis, and I’ll never know how. I also thank my daughter Jenny, and my sons Josh, Joey, Zach, and Jacob. They asked me often, “How much longer?” My children have been a constant reminder of *why* I was doing this. How could I tell them they were not allowed to give up on a dream if I allowed myself to quit? As a mom and an educator, I have always reminded them that school is important, and sleeping in on a school day was unacceptable. I tried to instill in them the desire to reach for their dreams and never give up just because something is difficult.

I need to thank my mother-in-law Kathy for loving me in the absence of my own momma who watches me from heaven. Thank you to my father-in-law Billy for all the texts encouraging me to keep going. I loved his message informing me he was practicing at calling me Dr. Wilsford. He gave me encouragement when I was unmotivated.

A big thank you to my committee. My chair Dr. Terri Wehmeyer made me feel that giving up was never an option. Dr. Weh messaged me if she thought I was slacking and encouraged me to keep going. She told me I was her first advisee to make it this far. So, I say to Dr. Weh, “WE DID IT!!” Dr. Fong is an amazing man, and he is a wealth of all things in statistics. The best day in this whole process was the day he sent the magic words, “You are almost there!” Without him I would still be looking at the spreadsheets wondering what to do with them. Thank you to Dr. Widhalm who is always a man of few words. He made sure I could get the data I needed to finish this project. I would also like

to give a special thank you to Dr. Condren and Dr. Schriver because they helped me narrow my survey, so I could get this finished. A half hour conversation with them cleared up most of my questions and brought the light to the end of the tunnel.

A special thank you goes out to all my friends, work family, and my cohort. Hillary, Debbie, and Sara, you have been my friends through it all. When I thought I was losing my mind you pulled me off the ledge. Friends like you are hard to come by. Sometimes I needed wine, other times maybe a margarita or shot of bourbon. Thank you so much for reminding me it would end. Rachel—I ~~blame~~ thank you for everything! “Hey, let’s get a doctorate!” I especially thank my favorite, best study-buddy of all times, Bob Matthews. I don’t know how I would have made it through comps without you. Thank you for all the study sessions and reminders for everything we had to know.

I am truly fortunate to have so many wonderful family and friends to encourage and support me through this journey.

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ABSTRACT

Teacher attrition has burdened the field of education for many years. The cost to taxpayers is enormous, but the cost to students is more. Researchers have looked for an answer for decades. This study sought to find a connection between teacher teaming and teacher attrition. This study was also conducted in order to examine whether team teaching has an effect on teacher attrition due to the collaborative efforts of members and whether the attributes of teaming make a difference in teacher attrition. When an experienced teacher leaves the classroom for other job opportunities, many times these seasoned teachers are replaced with new teachers with little experience. This can, and sometimes does have a negative impact on students. Teaming provides a number of positive experiences for students as well as teachers. In a teaming environment, teachers use common planning time to discuss student-needs as they arise. This study surveyed principals to determine their use of teaming and their teacher attrition. The survey also included an open-ended question to determine common themes regarding principals' perceptions of why teachers left. The hopes of this study were that key reasons why teachers left would be identified to help others understand the importance of teaming at the middle school.

CHAPTER ONE: INTRODUCTION

Teacher attrition is a problem that affects schools of all sizes across the nation. Although this study focused primarily on the United States, it is important to note that teacher attrition is not isolated and spans the globe. In as early as the 1700s Benjamin Rush noted that teachers were among the most important members in society, yet they are often treated with contempt and low rank (Runes, 1947). Cattell (1919) reported to The National Education Association that the profession should be filled with intelligent, and able-minded teachers who are given respect and admiration in all schools.

Each year, thousands of teachers leave the profession, and according to many researchers, as many as 50% leave within the first few years (Carver-Thomas & Darling-Hammond, 2017; Darling-Hammond, 2003; Gray & Tai, 2015; Weiss & Weiss, 1999), 33% leave after three years, and 40% leave after five years of service (Knox, 2005). Ingersoll (2001) found that although there were a larger number of retirements, the attrition rate for retirement was lower than that of other reasons. The issue of teacher turnover has been described by Ingersoll as a costly revolving door where some teachers leave before the end of the first year of teaching (Phillips, 2015).

According to the National Commission on Teaching and America's Future (2003) attrition costs taxpayers approximately \$7.3 billion each year. As explained by Bob Wise, former governor of West Virginia, attrition does cost school districts money, but the students and teachers are the ones who actually pay the price (Alliance for Excellent Education, 2014).

Theoretical Framework

The theoretical framework for this study was centered on a combination of Maslow's hierarchy of needs (Maslow, 1954) and Herzberg's hygiene theory (Herzberg

et al., 1959). According to Gawel (1997) both psychological theories contribute to the factors leading to teacher motivation and teacher job satisfaction. Teacher motivation and teacher job satisfaction have an impact on whether a teacher stays in the profession.

Maslow's hierarchy of needs. Maslow's (1954) work emerged as a culmination of theories of many psychologists, sociologists, economists, and other professionals of his day who were concerned with the concept of work motivation. His theory is recognized and accepted as foundational in the area of human motivation theory. Teacher attrition is impacted by Maslow's theory which states that all humans require satisfactory fulfillment of their physiological and safety needs, or needs for survival, before moving to the next higher level. Maslow's five stages are divided into both deficiency needs and growth needs. The lower four levels are known as deficiency needs and the top level is growth need. Maslow believed people suffered disruption of satisfaction on their search for self-actualization due to failure of meeting lower level needs. Only one in 100 people ever reaches self-actualization because modern society makes special note of the social needs *esteem* and *love* (Maslow, 1954). Maslow's (1954) lower needs are composed of physiological and biological needs to survive.

Maslow gives basic/lower needs as physiological needs (food, water, warmth, rest), safety needs (safety and security), belongingness and love needs (intimate relationships and friends), and esteem needs (prestige and feelings of accomplishment). These lower needs must be met in the teaching profession or attrition occurs. Teachers leave and seek other avenues to satisfy these needs (Cannon, 2013).

Once physical or basic needs are met, an individual will move to the second stage in the hierarchy, safety and security, or the need of protection from harm. According to Cannon (2013) these needs were often unmet in schools because they require trained,

knowledgeable staff. To fully meet this need, staff members must protect not only the physical safety of children, but emotional safety as well (Cannon, 2013).

Maslow (1954) believed one then would move up the scale to love and comfort, seen by Cannon (2013) within a school system as the ability of the principal to communicate and observe staff members or attend meetings regularly. Support is necessary for personal and professional growth. This includes professional development and community meetings (Cannon, 2013).

After love and comfort is esteem needs, met by recognizing one's own strengths and mastery of skills in leadership (Cannon, 2013). These skills are recognized in performance reviews, public statements by the Board, and levels of authority matching level of responsibility. Maslow continued to develop his theory and added levels for not only cognitive, but also esthetic needs (Cannon, 2013).

The highest and final stage is the realization of oneself and the ability to accept life as it presents itself. Maslow (1954) saw this final stage as making the most of all opportunities presented, along with the ability to live life to the fullest. Few reach self-actualization, but Thibodeaux, Labat, Lee, and Labat (2015) describe these individuals as those who are decisive, use better judgment, and have a clearer understanding of right and wrong. They also have a better interpretation of philosophy, music, politics, and art.

When applying Maslow's theory to teaching profession, Cannon (2013) suggested that the basic needs of teachers, according to Cannon (2013), are those of physical safety. A teacher must have space both indoor as well as outdoor, with adequate and appropriate equipment in order to meet the needs of students (Cannon, 2013). Safety needs of teachers may include health insurance as well as a competent and supportive administration (Cannon, 2013). The physiological needs include those such as adequate

planning time, communication, and informational meetings. Cannon (2013) also sees esteem needs as those opportunities for building mastery of education, which includes performance reviews.

McCarthy (1997) found the prevalent need given at any time will dominate and occupy an individual's consciousness until fulfilled, and deficiency needs are never completely satisfied, so there is rarely motivation to change behavior. At the upper end of the hierarchy, growth needs are for self-actualization and are rarely completely satisfied. McCarthy (1997) believed when these needs were valued by an individual, they are met as individuals grow in their desire for knowledge and understanding.

Herzberg's two-factor or motivation-hygiene theory. Rather than focusing on the extent of deficiency needs, Frederick Herzberg's (1987) theory centered on work outcomes, such as achievement and recognition. Herzberg (1987) described contributors to employee satisfaction as (a) interesting work, (b) challenging work, and (c) work containing increasing responsibility. On the other hand, dissatisfaction was attributed to low salaries, inadequate space, disagreeable boss, and rules with which the employees did not agree. The happier employees felt about a particular task, the more satisfaction and motivation they experienced. Motivational factors included enjoyment of their work, recognition of accomplishments, and opportunities for advancement; whereas, unhappy employees felt dissatisfaction when they believed there was no opportunity for advancement (Herzberg, Mausner, & Snyderman, 1959).

Herzberg, Mausner, and Snyderman (1959) found that satisfaction and dissatisfaction were separate factors in determining job satisfaction. They believed certain factors were satisfiers when present, but not dissatisfiers when they were *not* present. Herzberg et al. (1959) labeled dissatisfying factors as hygiene factors. Satisfiers

in a work environment implied motivation opportunity while absence of satisfiers did not result in dissatisfaction (Herzberg et al., 1959). On the contrary, the presence of dissatisfiers in the work environment did not necessarily cause a negative motivation in workers. However, the absence did result in less dissatisfaction of workers. It is for this reason that Herzberg (1959) rationalized his belief that motivation and hygiene factors were mutually exclusive. He claimed satisfaction was not the opposite of dissatisfaction, but rather the opposite of satisfaction was no satisfaction.

Satisfaction factors were labeled as “motivation factors” because they motivate individuals to higher performance (Herzberg et al., 1959). The following were identified as factors of dissatisfaction:

1. salary
2. possibility of growth
3. interpersonal relations (subordinates)
4. status
5. interpersonal relations (superiors)
6. interpersonal relations (peers)
7. supervision - technical
8. company policy and administration
9. working conditions
10. personal life
11. job security

Problem Statement

Although current research on *teaming* (pairing up a group of teachers with a group of students) and impacts on student achievement exists (Arhar, Johnson, & Markle,

1989; Cook & Faulkner, 2010; Haverback & Mee, 2013; Wallace, 2007), information on teacher attrition where teaming is in place is lacking (Wheeler-Clouse, 1999; Wilson, 2007). Studies show that the use of teaming positively impacts student achievement (Arhar, Johnson & Markle, 1989; Cook & Faulkner, 2010; Haverback & Mee, 2013; Wallace, 2007) and gives veteran teachers a way to reflect on best practices (Maeroff, 1998). However, the research shows little information on whether teaming has an impact on teacher attrition. The use of teams has been prevalent since the 1980s (Arhar, Johnson, & Markle, 1989; George & Alexander, 1993). Unfortunately, due to the high cost of implementation and continuation of teaming, educational cuts may occur without research on best practices (Hoyer, 2013).

This study will add to the pool of research to assist with justification of the high expense of teaming to the Board of Education and the community. Teaming is not only good for student achievement, but also for teacher job satisfaction. This study will give policymakers a way to keep quality teachers in the classroom and stop the hemorrhage of trained educators. Teacher attrition has significant effects for the educational system. Not only is attrition a monetary drain on schools, but the constant turnover is also difficult for students.

Purpose for the Study

The purpose of this study was to determine the difference in attrition between middle schools who practice teaming and those that do not. A mixed methods study was used in order to provide a more robust and broader perspective. School administrators can no longer sit back and watch as effective teachers leave the profession. As presented by McKinney et al. (2007), school leaders must understand teacher retention and why some educators are successful and continue to teach in schools with staffing difficulties.

According to Flynt and Morton (2009), teacher turnover has an effect on student outcomes, so school leaders must examine the problem. Data were analyzed to ascertain whether teachers in a teaming environment would choose to stay in the field of education.

This study was conducted in hopes to gain more knowledge on whether the use of interdisciplinary teaming impacts attrition. When seasoned teachers leave, many schools replace these veterans with untrained and sometimes unlicensed individuals. This does not always reap positive results, and lower student performance may result.

Research Questions

The purpose of this study was to determine the differences between the attrition rate at Missouri middle schools who use teaming and those who do not use teaming. The following questions guided this study:

RQ1: What impact does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming?

Sub Question 1: What was the difference in teacher attrition rate in the school year 2013-2014 between schools that have teaming and schools that do not have teaming?

Sub Question 2: What was the difference in teacher attrition rate in the school year 2014-2015 between schools that have teaming and schools that do not have teaming?

Sub Question 3: What was the difference in teacher attrition rate in the school year 2015-2016 between schools that have teaming and schools that do not have teaming?

Sub Question 4: What was the difference in teacher attrition rate in the school year 2016-2017 between schools that have teaming and schools that do not have teaming?

Sub Question 5: What was the difference in teacher attrition rate in the school year 2017-2018 between schools that have teaming and schools that do not have teaming?

RQ2: What are the perceived reasons for teacher attrition?

Null Hypotheses

H₀₁: There is no statistically significant difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that do not have teaming.

H₀₂: There is no statistically significant difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that do not have teaming.

H₀₃: There is no statistically significant difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that do not have teaming.

H₀₄: There is no statistically significant difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that do not have teaming.

H₀₅: There is no statistically significant difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that do not have teaming.

Limitations/Delimitations/Assumptions

The researcher's intent was to provide accurate and significant research to enhance the field of study in education. The number of variables affecting the outcome of this study is unknown. Those variables outside the control of the researcher are limitations. The delimitations are designed with the intent to gain the most accurate, as well as relevant data. The assumption is all those answering the questions for the study are truthful and honest.

Limitations

1. Honesty of answers to the survey due to subjective nature of self-reporting and individual interpretation of events
2. Only principals included in study
3. Number of returned surveys

Delimitations

1. Researcher included data of all principals in middle schools in Missouri willing to participate in the study
2. Delimited to MS buildings including grades 6 – 8 only in the state of Missouri

Assumptions

1. The researcher made the assumption principals will answer the survey with honesty and integrity.
2. Generalizable only to Missouri middle schools.

Design Controls

This study was based on survey research and examined the impact of teaming on teacher attrition in Missouri middle schools. Invitations were sent to all school districts in the state of Missouri in order to gain a data pool large enough to make conclusions. All

district principals who agreed to participate were sent the survey via email. Because no existing survey met the necessary criteria established by the researcher, a new survey was created. This tool was piloted and tested for validity before approval for the use in this study. The focus of this study was the impact of teaming on teacher attrition at the middle school level. For this reason, questions regarding attrition rates were included in the survey tool.

To ensure the most honest and accurate data, the survey was conducted with complete anonymity using SPSS for all respondents, and no identifying features of individuals or school districts were included.

Definition of Key Terms

Interdisciplinary Teaming/Teaming - Interdisciplinary teaming is an organizational feature of middle schools. It involves pairing up a group of teachers with a group of students, where the teachers instruct their disciplinary curricula (Ruggiero, 2014). For the purposes of this study *teaming* and *interdisciplinary teaming* will be interchangeable.

Teacher Job Satisfaction - The affective orientation an employee has towards his or her work (Bishay, 1996).

Teacher Attrition - For the purpose of this study, defined as those teachers who choose not to continue to teach in a classroom in the field of education, move to another position, leave their current district, and who leave the field of education for another occupation (Imazeki, 2005; Ingersoll, 2001).

Teacher Retention – Is considered keeping teachers who have entered the field of teaching in the field of education (Smith & Ingersoll, 2004).

Summary

This chapter provided a brief introduction to the impact of *teaming* on teacher attrition in middle schools in the state of Missouri. By identifying effects of teaming on teacher attrition, school leaders have leverage to justify the higher cost associated with interdisciplinary team teaching. With this thought in mind, this researcher was interested in whether teaming has an effect on teacher attrition. Administrators must keep the best assets in the classroom rather than lose them to other schools or fields outside education. Teacher attrition is impacted by Maslow's theory that states all humans require satisfactory fulfillment of their physiological and safety needs, or needs for survival, before moving to the next higher level. The same can be said for Herzberg's motivation and hygiene factors since motivator factors impact job performance, and hygiene factors can reduce job dissatisfaction.

Chapter two of this study will include a review of the related literature. The review of literature will be organized thematically around the following two themes: teacher attrition and interdisciplinary teaming. Chapter three contains the methodology, including the sample group, survey development, and reporting methods for this study. Chapter four includes all findings from this study along with the correlation to the research. Chapter five will discuss a summary of this study, as well as implications of this study.

CHAPTER TWO: REVIEW OF LITERATURE

Introduction

Each year, thousands of teachers leave the profession, and according to many researchers, as much as 50% leave within the first five years (Darling-Hammond, 2003, Gray & Tai, 2015; Weiss & Weiss, 1999). This chapter includes a review of relevant literature on the topic of teacher attrition as well as on team teaching, referred to here as *teaming*. The main focus was on studies completed between 2007-2017 focused on interdisciplinary team teaching, professional learning communities, teacher attrition, teacher retention, job satisfaction, teacher self-efficacy, teacher voice and input, teacher induction, teacher mentorship, student discipline, teacher salary, and administrative support. Although attrition is not a new subject of study, little is known about how the aspects of team-teaching affects teachers and whether they stay in the profession (Watlington, Shockley, Guglielmino, & Felsher, 2010.)

Teacher Attrition

American public education is suffering a loss of highly qualified teachers (Watlington et al., 2010). Educational literature is filled with studies of novice teachers leaving the profession (Feng, 2010), even though much attention is given to their development (Grissom & Harrington, 2010; Mitchell, 2013; Weiss & Weiss, 1999). Anhorn (2008) gives lack of orientation, isolation, lack of time, classroom management issues, low pay and benefits, teacher preparation, principals, other teachers, and parents as reasons for leaving. Other studies show depression and isolation (Boreen, Johnson, Niday & Potts, 2009), while some give workload, school climate and lack of respect as reasons to leave (Chong & Low, 2009; Kopowski, 2008). Darling-Hammond (2003) used categories of salary, working conditions, teacher preparation, and lack of mentoring

support for reasons teachers leave early in their careers. While Grissom (2011) found pay impacted the turnover rate, several other studies have shown that although salary is important, it is not a major contributing factor determining why teachers leave (NCES, 1997; Morse & Mujtaba, 2008; Scafidi, Sjoquist, & Stinebrickner, 2003). In a study from 1992, Adams found that although some districts may have partially alleviated the attrition problem by raising salaries, there was a continuous decline in morale. Additionally, Mendel (1987) found low teacher satisfaction leads to decreased productivity and teacher burnout. Mendel (1987) claimed there is, “a loss of concern and detachment from the people with whom one works, decreased quality of teaching, depression, greater use of sick leave, efforts to leave the profession, and a cynical and dehumanized perception of students” (p. 5). No matter the researcher, reasons for attrition remain similar.

Research obtained from the U.S. Department of Education in 2010 documents attrition rates for public schools at 15% (Keigher, 2010). This study is conducted every three years and includes a follow up survey. During a briefing in 2007, Carroll (2007) alerted the National Commission on Teaching & America's Future of the attrition problem and stated,

Until we recognize that we have a retention problem, we will continue to engage in a costly annual recruitment and hiring cycle, pouring more and more teachers into our nation’s classrooms only to lose them at a faster and faster rate. This will continue to drain our public tax dollars, it will undermine teaching quality, and it will most certainly hinder our ability to close student achievement gaps. It does not have to be this way (p. 4).

Likewise, in a study from 2008, Gonzalez, Brown, and Slate found lack of administrative support, student discipline, and low salary levels were the leading causes

of teacher attrition. Although school enrollment is on the rise, it is not enough to keep up with the demand for replacement teachers, creating a dilemma that “affects the nation” (Gonzalez, Brown, & Slate, 2008). Wong (2003) gives \$50,000 as the cost schools spend per year to replace new teachers leaving the profession. The estimated cost to the nation to recruit, hire, and train replacements due to attrition is approximately \$7.34 billion per year (Kapadia, Coca, & Easton, 2007). Because of the shortage of effective teachers, many researchers have completed studies on why teachers leave and have attempted to identify solutions (Watlington et al., 2010). With the annual replacement cost over \$7 billion, retaining teachers is financially beneficial and a reason to consider other methods (Feng, 2010).

The National Center for Educational Statistics (2016) reported 3.2 million public school teachers and 0.4 million private school teachers in United States primary and secondary schools. Of those teachers who left education, 53% reported that their general work conditions were better in their current position than in teaching.

The demands of the teaching profession are increasing, and administrators must do what is necessary to recruit and retain highly qualified teachers (Ingersoll & Smith, 2003; Mitchell, 2013). According to a study by Weiss and Weiss (1999), approximately 40-50 percent of new teachers in the United States leave the profession within the first five years of teaching. Levin (2006) reported in the *Special Analysis of 2005* a teacher turnover rate of 16% which included 8% transferring to other schools, and 8% totally leaving the teaching field. In addition, The Institute of Public Policy reported in 2010 the total turnover rate for Missouri was also 16% (Grissom & Harrington, 2010). In a similar report, researchers at Wichita State University found United States teacher attrition rates of 33% during the first three years of teaching, jumping to a staggering 46% within the

first five years (Pearman & Lefever-Davis, 2012). Additionally, in 2010, Missouri Department of Elementary and Secondary Education reported 48.4% of teachers in Missouri had less than 10 years teaching experience, and 26% had less than five years teaching experience. Furthermore, in April of 2015, Gray and Taie (2015) of the United States Department of Education published the Beginning Teacher Longitudinal Study, which addressed factors influencing teacher attrition and mobility, and reported 10% of teachers did not return after the first year, 12% after the second and 17% after the third.

Much like the United States, Canadian statistics show only six of 10 graduates from 1995 were still teaching in elementary and secondary positions (CTF, 2003), and in 2004, Canada experienced a 30% teacher turnover (CTF, 2004). Teacher attrition crosses not only the United States (Darling-Hammond, 2001; Ingersoll & Smith, 2003; Smith & Ingersoll, 2004), but also Canada (Kutsyruba, Godden, & Tregunna, 2014), the United Kingdom (Smithers & Robinson, 2003), Finland (Santavirta, Solovieva, & Theorell, 2007), Israel (Nir, 2002), and Australia (Stoel & Thant, 2002). The prevailing opinion finds teachers decide to leave within the first five years (Greiner & Smith, 2006; Heller, 2004; Ingersoll & Smith, 2003; Kaff, 2004; National Commission on Teaching and America's Future, 2003), making the initial training time frame the most crucial (Darling-Hammond, 2001; Ingersoll & Smith, 2003; Kutsyruba, Godden & Tregunna, 2014; Smith & Ingersoll, 2004, Smithers & Robinson, 2003; Stoel & Thant, 2002). In 2005, the U.S. Department of Education found that attrition had increased by 50% in the last 15 years, which negatively influenced student achievement (Alliance for Excellent Education, 2005), because when teachers leave, schools are often forced to fill these positions with teachers who are underqualified, resulting in lower standards (Ingersoll, 2007). Feng (2010) found the most capable teachers are the ones most likely to leave in

search of better opportunities. Other researchers also found higher achieving teachers are likely to leave schools with lower achieving students (Boyd, Lankford, Loeb & Wyckoff, 2005).

While a vast number of teachers leave the profession, in 2006 Cochran-Smith, the former president of the American Educational Research Association, documented teachers remained in education when they maintained a vision of potentials and possibilities of student successes. Although Cochran-Smith (2006) claimed that teachers with a positive perspective would be resilient, many others cite persistence and unwillingness to admit defeat as the likely reason for overcoming adversities inherent in the first years of teaching (Grissom, 2011; Mitchell, 2013; Weiss & Weiss, 1999).

Many see teacher quality and ability as some of the most important school-based factors contributing to student achievement and educational improvement (Cochran-Smith, 2006; Darling-Hammond, 2006; Rivkin, Hanushek, & Kain, 2005). Half these new teachers leave the profession within the first few years (Greiner & Smith, 2006; Heller, 2004; Ingersoll & Smith, 2003; Kaff, 2004; National Commission on Teaching and America's Future, 2003). Additionally, 33% leave after three years, and another 40% after five (Bureau of Legislative Research, 2006; Knox, 2005; NCTAF, 2003; Reed, Reuben & Barbour, 2006; Schacter & Thum, 2005), with the most talented new teachers among the highest attrition rate (Colby, 2001; Schacter & Thum, 2005). Evidence supports teacher knowledge and instruction is more effective after a few years in the field (Kain & Singleton, 1996; Reutzel & Cooter, 2008). The Alliance for Excellent Education (2008) found teacher attrition affects the quality of education for students. When teachers either transfer schools or leave education for other professions, the quality of education

decreases due to inconsistencies in the classroom (Alliance for Excellent Education, 2008).

To assist with the shortage over the last few decades, several federal and state government programs have been established to add to the teaching workforce. Troops to Teachers, established by U.S. Congress was designed to assist military personnel in becoming teachers (Borman & Dowling, 2008). Teaching as a Priority (TAP) went so far as to offer not only a signing bonus, but other incentives to recruit teachers for some schools (Kopp, 2001). The special offers and bonuses are not enough to keep teachers from leaving for many reasons. No matter which statistical data are used, qualified teachers leaving education has a negative impact on students and their abilities to adapt to an ever-changing faculty (Pearman & Lefever-Davis, 2012). Research shows that teacher attrition can be attributed to seven distinct areas: job satisfaction, self-efficacy, salary, autonomy, induction and mentorship, student behavior problems, and administrative support (Grissom, 2011; Kopp, 2011; Mitchell, 2013; Pearman & Lefever-Davis, 2012; Thibodeaux, Labat, Lee, & Labat, 2015; Weiss & Weiss, 1999).

Teacher Job Satisfaction

The Teacher Follow-up Survey conducted by the Center for Educational Statistics (2007) found that 40% of teachers left due to job dissatisfaction, and according to Ingersoll (2001), those teachers left education for better opportunities. Fatima (2012) said, "education is the backbone of a nation" (p. 259) and that teachers must be satisfied with their job to be effective in the classroom. Since teachers are the chief contributors to the structure of the educational system, job satisfaction is an important factor in the retention of teachers (Thibodeaux, Labat, Lee, & Labat, 2015). As previously stated, many factors affect the issues surrounding teacher attrition. Bolman and Deal (2008)

stated relationships will either cultivate the best atmosphere in an organization or the worst, depending on how they develop between groups of people.

According to Moore (2012), increased difficulties within the profession are contributing to more dissatisfaction. Knox and Anfara (2013) found job satisfaction was the variable most frequently studied because job satisfaction has a tremendous factor on success. Cannon's (2013) study showed the treatment of employees affects job performance, and fair treatment of employees yields positive customer interaction (Cannon, 2013). To further the point, McEwan-Adkins (2005) also found teachers with lower morale experience physical and emotional exhaustion, show negative attitudes, and function sub-par in the classroom.

The findings of Perrachione, Petersen, and Rosser (2008) concluded that intrinsic variables such as working with students and personal efficacy contributed to a teacher's lack of job satisfaction more than either low salary or overload. A survey found that many teachers remain in the profession due to intrinsic motivation, and furthermore, these teachers accomplish tasks for the pleasure and the challenge of their own personal fulfillment rather than the incentives (Ryan & Deci, 2000). For this reason, Ryan and Deci (2000) found these intrinsically motivated teachers remain in education because they find teaching a rewarding career instead of a tedious job requiring an external motivation.

Many studies have examined common planning time to find an answer (Mitchell, 2013; Wilson, 2007; Yisrael, 2008). Mitchell's (2013) case study examined schools using a common planning time, where teachers worked together to create common lessons and discuss student concerns. His research indicated that teachers view extra meetings as a cause for increase in stress and burnout. As a result, teachers requested meetings without

an administrative agenda to discuss those topics relevant to them. Yisrael (2008), on the other hand, gives isolation as a negative outcome with a decrease in morale. His research suggests participation in a team is a positive morale booster. Schools with higher attrition rates have more inexperienced teachers and possibly less effective teachers (Lucksinger, 2000; Spradlin & Prendergast, 2006), which impacts student-learning (White & Mason, 2006). Wilson (2007) studied a middle school group of preservice teachers who participated on a team. These teachers found that they could grow and change with other team members.

Teacher Self-Efficacy

Members of a team feel empowered and are open to increase knowledge and collegiality (Maeroff, 1993). There is a direct correlation between teacher collaboration and teachers' feeling of efficacy and job satisfaction (Arhar, Johnson, & Markle, 1989). Researchers concluded there was a "reciprocal influence between teacher's self-efficacy beliefs and academic achievement" (Caprara, Barbaranelli, Steca, & Malone, 2006, p. 486). When teachers support each other and collaborate, they feel an increase in efficacy (Louis & Smith, 1992).

According to a study completed by members of the Harvard Graduate School of Education (Johnson, Berg, & Donaldson, 2005), teacher satisfaction with work and effectiveness is directly related to retention. Grant (2006) sees self-efficacy as a teacher's ability to bring about a desired outcome for all students. A teacher's sense of efficacy and satisfaction on the job can be either positively or negatively affected by factors such as a lack of adequate supplies and isolation. Those factors interfere with a teacher's ability to teach and students' ability to succeed (Johnson, Berg, & Donaldson, 2005).

The researchers of a Pan-Canadian analysis of teacher induction and mentorship programs (Kutsyuruba, Godden, & Tregunna, 2014) found the teaching profession “has long been seen as an occupation that ‘eats its young’ and in which the beginning of a new teacher’s journey is similar to a ‘make or break,’ ‘sink or swim,’ ‘trial/baptism by fire,’ or ‘boot camp’ experience” (p. 6). New teachers face a significant number of challenges (Andrews & Quinn, 2004; Anhorn, 2008; Darling-Hammond, 2003; Glickman, Gordon, & Ross-Gordon, 2004; Johnson & Kardos, 2002, 2005) including:

- egg-crate structure of schools
- feelings of isolation, stress, and culture shock
- lack of adequate resources and support
- lack of planning time and collegial interaction
- challenging teaching assignments
- unclear or inadequate expectations
- lack of information and orientation about current school system and policies.

With so many negative aspects of teaching, the majority choose to leave teaching even with the financial assistance offered, and more than 11% leave without completing the first year (Black, 2001). Those who leave immediately admit some variety of dissatisfaction with low salary, poor working conditions, lack of classroom resources, student behaviors, and lack of decision-making input and developmental opportunities (Ingersoll, Merrill, & Stuckey, 2014).

Teacher Salary

Along with discipline, smaller classes, parental involvement, and more autonomy, teacher compensation is a major factor in teacher attrition (Feng, 2010; Futernick, 2007; Ingersoll, 2007). It is no secret that low salary has been associated with high teacher

attrition rates, and teachers leave education for better salary and better benefits (Cassandra, Lucrecia, Glenn, & Dominic, 2007; Feng, 2010; Guarino et al, 2006; Liu & Meyer, 2005; Ondrich et al., 2005; Provasnik & Dorfman, 2005; Tye & O'Brien, 2002). Studies show the retention of quality teachers depends on the ability of educational leaders to provide a competitive salary and a positive, supportive environment (Ingersoll & Smith, 2003; Mihans, 2009). Other studies found that salary determined length of time in the profession (Murnane, Richard, Olsen, & Randall, 1989), and as salaries increased, attrition decreased (Imazeki, 2005; Murnane & Olsen, 1990). Murnane and Olsen (1990) also report new teachers paid more than peers in nearby districts remain in the classroom longer. Although this may be true for some, Podgursky et al. (2004) found the retention rates for math and science teachers were not affected by higher salaries due to potential earnings outside the field of education.

Since school budgets may not be prepared for the increase in salaries, Ingersoll (2001) suggests reallocation of resources to district programs providing support for new teachers and other areas noted as causes for attrition. Considering the high demands made of teachers, the low salary is demoralizing (Jackson, 2005). Jackson (2005) also argued that low pay makes it difficult to recruit and retain talented, veteran teachers, and “today, as earlier, teaching remains an occupation with relatively low salaries and even lower prestige” (p. 2).

Similarly, in his State of Education address, Secretary of Education Richard Riley told the American people, “I have come to the conclusion that we will never really improve American education until we elevate the teaching profession and come to grips with the issue of teacher compensation” (Riley, 2000, p. 9). Long before Riley, Leon Keyserling (1967) presented his findings at the Conference on Economic Progress. He

stated teachers not only earned a smaller salary than other occupations requiring a degree, but “the lag in teachers’ salaries means that there has been neglect of the right of teachers to share equitably in advancing living standards. And insofar as teachers have not kept up with others to date, this lag will continue and augment, unless the national conscience is awakened” (p. 29). Although many have suggested a target increase in salary based on teacher effectiveness, others found by increasing salaries of certified staff and administrators, higher attrition occurred (Gritz & Theobald, 1996).

Over the last few decades, several federal and state government programs have been established to add to the teaching workforce. Troops to Teachers, established by the U.S. Congress was designed to assist military personnel in becoming teachers (Borman & Dowling, 2008). Teaching as a Priority (TAP) went so far as to offer not only a signing bonus, but also other incentives to recruit teachers for some schools (Kopp, 2001). According to Herzberg, Mausner, and Snyderman (1959) the motivation factors stemming from the human desire to achieve, thus producing psychological growth, are the cause for work dissatisfaction. Since salary, climate, and administrative policies are cause for dissatisfaction, bonus pay would not be enough to keep teachers in the field of education.

Teacher Autonomy

According to Richard Ingersoll, the greatest factor in teacher attrition is lack of input (Riggs, 2013). Many researchers agree with Ingersoll when he claims teachers would like to take part in decision-making alongside administrators. It does not cost the district anything, but in some cases it may be a deciding factor in whether a teacher leaves (Hirsch, 2006; Ingersoll & Smith, 2003; Liu & Meyer, 2005; Riggs, 2013). Maslow’s esteem needs must be met, where teachers feel a sense of accomplishment or

prestige to continue (Maslow, 1954). There are times teachers do not “call the shots... have very little say...” are underappreciated, and feel teaching “is a disempowered line of work” (Riggs, 2013). Egley and Jones (2005) found that when they encouraged teachers to take a role in leadership, overall morale improved. It is not a surprise that schools with less turnover are those who allow teachers a voice in decision-making (Ingersoll, 2007; Killeavy, 2006; Marvel et al., 2007). Wiley (2000) agreed, and propose teachers become more involved with hiring and goal-setting decisions. Leithwood and McAdie (2007) found the support system for the work of teachers and the outcome for students was the essential purpose for the school structure.

Furthermore, teachers thrive in environments where the school values all teacher input and participation in successful school reform (Conley & Muncey, 1999; Lieberman, 1988; Urbanski & Nickolaou, 1997). Futernick (2007) was surprised to find that the quality of staff relationships and opportunities to participate in school decision-making mattered to teachers and was a factor in whether they stayed in education or left the field all together.

Teacher Induction and Mentorship

Another important factor of keeping new teachers in the education profession is professional learning and mentorships (American Federation of Teachers, 2001; Carver & Feiman-Nemser, 2009; Darling-Hammond, 1999; Fletcher, Strong & Villar, 2005). Jones (2013) found few school districts actually mandate, fund, and implement effective induction and mentoring programs. The schools must analyze mentor programs already in place and develop policy to support quality (Carver & Feiman-Nemser, 2009). Exit surveys show poor support for new teachers as the most cited reason for prematurely leaving the field (Darling-Hammond, 1999; Smith & Ingersoll, 2004). As a result of these

findings, mentorship programs have increased (Ingersoll & Smith, 2003; Smith, 2007; Smith & Ingersoll, 2004). Factors such as availability of mentors, new teacher induction, and administrative support affect attrition (Borman & Dowling, 2008; Greiner & Smith, 2006; Guarino, Santibanez, & Daley, 2006; Ingersoll, 2003; Ingersoll & Kralik, 2004; Liu & Meyer, 2005; Strong, 2005; Tye & O'Brien, 2002; Worthy, 2005). As indicated by Ingersoll, Merrill, and Stuckey, (2014), teachers with more experience develop not only better instructional methods, but a number of critical abilities crucial to student success. Ingersoll and Strong (2011) identified a number of ways mentoring programs assisted new teachers. Scherer (2012) also found that novice teachers should have “systematic, intense mentoring in the first year” (p. 18) because it is a critical part of the induction process and assists in keeping new teachers in the field. Feng (2010) echoed this suggestion and further stated the schools must place a greater emphasis on training.

Veteran teachers better understand student behaviors, have the ability to instruct students of diverse learning styles and backgrounds, and know how to communicate with parents to promote both positive student work habits and positive self-esteem (Ingersoll, Merrill, & Stuckey, 2014). Through support and mentoring, these veteran teachers make a positive difference for novice teachers in areas such as retention, improved student academic success, and new teachers' quality of instruction (Ingersoll & Strong, 2011). In a 2014 study, Ingersoll, Merrill, and Stuckey found that novice teachers assigned to mentors were less likely to leave than those teachers without mentors. When new teachers feel overwhelmed with stress, lack of experience is a problem and contributes to attrition (McKinney, Berry, Dickerson, & Campbell-Whately, 2007). Ingersoll reports that it is not a matter of new teacher commitment, but rather a support problem (Riggs, 2013).

Moreover, Hanson and Moir (2008) found several areas where mentoring made an impact on the veteran teachers assigned to the novices. The study found that mentoring broadened the veteran teacher's perspective of not only the teaching profession, but also themselves (Hanson & Moir, 2008). This mentoring had a profound impact on pedagogy as well as student learning. It also promoted leadership among the veteran teachers and supported quality practices of the mentors and mentees. Mentors felt recharged and learned new practices from the mentees useful for their own classrooms (Hanson & Moir, 2008).

In an interview with Liz Riggs (2013), Ingersoll indicated a correlation between support and the likelihood of leaving. Thibodeaux et al. (2015) agreed with Ingersoll and Strong (2011, in that retention improved when schools employed mentoring. The National Center for Education Statistics (1997) and Grissom (2011) concluded the need for two years of mentoring programs and on-the-job training to keep teachers in the classroom and stem the turnover (Neason, 2014). Ingersoll believed this "comprehensive induction" two-year program should include a skilled mentor, common planning time, and consistent contact with administration and less inconsistencies among not only states, but schools and districts (Riggs, 2013).

Increases in student achievement are realized when schools hire quality teachers with skills and knowledge (Berry, 2006; Wong, Britton, & Ganser, 2005) because once a new teacher moves past the induction phase, the central focus shifts to student connections (Strahan & Hedt, 2009). However, when teachers choose to leave the profession, they are replaced most often by teachers with even less experience, negatively affecting student achievement (Alliance for Excellent Education, 2005; Clotfelter, Ladd,

& Vigdor, 2006; Howard, 2003), at a burden to school budgets and a strain on educational resources (Boe, Cook, & Sunderland, 2008; Honawar, 2007).

Student Behavior Problems

Another area affecting teacher attrition is student behavior problems (Boyd, Grossman, Ing, Lankford, & Wyckoff, 2009; Ingersoll, 2001). Ingersoll himself notes lack of respect is an intangible reason he personally quit the profession (Riggs, 2013). Teachers experience increased levels of fear and stress when exposed to aggressive behavior (Dworkin, Haney, & Telschow, 1988). Several researchers believe more on-the-job training with classroom management support is necessary because upon graduation most new teachers do not have the knowledge or confidence to deal successfully with student misbehavior (Buckley, Schneider, & Shang, 2004; Britt, 1997; Kelly, Stetson, & Stetson, 1997; Macdonald, 1999). When teachers are unable to deal with the frustration of disruptive students, they tend to leave the profession (Brill & McCartney, 2008; Smethem, 2007). New teachers consistently cite classroom management as a major area of concern since many teacher preparation programs do not provide the necessary training or strategies and practices needed to address student behaviors (Brill & McCartney, 2008; Jenks & Meister, 2000; Meister & Melnick, 2003; Smethem, 2007). Additionally, Smith and Ingersoll (2004) consider this on-the-job training or induction program as the key element in keeping teachers in the classroom beyond the first year. Ingersoll cites a major factor in attrition as discipline and student misbehavior. He also claims those schools which better cope with these issues have “significantly better teacher attrition” (Riggs, 2013).

Teachers can become so involved in a myriad of discipline issues to the point that teaching may be an afterthought of limited instructional time, not to mention the physical

exhaustion and decreased enthusiasm for the profession (Deal & Peterson, 2009). Furthermore, Vail (2005) states the safety of students and teachers alike is dependent on a school-wide discipline policy that must be consistent and then also notes that students with disruptive behavior affects teacher attrition.

Administrative Support

Administrators have a significant impact on teacher attrition. As cited in Perachione et al. (2008), Sawchuk stated that effective teachers are not always encouraged to remain in the classroom, and teacher retention is a challenge for many districts. Kukla-Acevedo (2009) found many teachers who leave education report lack of administrative support as the reason for leaving. Wong (2003) believes administrators are in schools to assist teachers, so a principal should be present to handle discipline (Black, 2004). A number of other researchers report it is important for teachers to work in environments where administrators collaborate with teachers about workload and assignment and also create supportive relationships with colleagues for personal support to cope with everyday working conditions (Adams, 1992; Kapadia, Coca, & Easton, 2007, Gallimore & Ermeling, 2010; Thibodeaux et al., 2015). Levin (2008) notes the quality of the educational leader is the most important factor to a teacher. A teacher who does not feel support or receive adequate guidance leaves the field of education (Kurtz, 1983). Little and Bird (1981) saw the building principal leadership as the critical piece for the success of teachers, and autocratic administrators hamper teacher morale (Vail, 2005). Xu (1986) echoes this by showing a positive correlation between caring leadership and subordinate job satisfaction and further claims that leadership is most influential to job satisfaction. In an article for Education Week, Gallamore and Ermeling (2010) note, "...our experiences also suggest that school-wide factors, such as organizational capacity

and stable building leadership that makes instructional goals a priority, are critical contributors to sustaining productive learning teams.” This is important, since the most frequently cited reason for teacher attrition is lack of administrative support (Borman & Dowling, 2008; Greiner & Smith, 2006; Littrell, Billingsley, & Cross, 1994) and may be the cause of teacher burnout as well as dissatisfaction (Prather-Jones, 2011).

Since new teachers enter the profession without collegial or administrative support, the building principal must provide support (Flynt & Morton, 2009). Thibodeaux et al. (2015) found principals were mostly supportive of new teachers, although other research shows some new teachers give lack of administrative support as a reason for leaving the teaching profession (Alliance of Excellent Education, 2008; Robertson, Hancock, & Allen, 2006). To lower attrition rates and migration, several researchers found principals must be effective and supportive (Brown & Wynn, 2009; Grissom, 2011).

Conversely, schools with the greatest retention of teachers are those with a high level of administrative support for teacher collaboration time and professional development (Wells & Feun, 2012). Several studies found a positive correlation between a supportive administration and teacher retention (Guarino, Santibanez, & Daley, 2006; Powell, 2004). Teachers appreciate administrative support with a trusting relationship (Richards, 2004). Cook and Faulkner (2010) believe the common thread is administrators with high expectations, professionalism, and trust in their teachers. These administrators state their expectations, give teachers the time necessary to work together and trust them to fulfill their professional duties with respect to accountability and effectiveness (Cook & Faulkner 2010; Hirsch, Emerick, Church, & Fuller, 2007; Richards, 2004). In this respect, a teacher who needs improvement will feel more empowered with a supportive

administrator (McElroy, 2005), and empowerment leads to higher teacher morale (Maehr, Midgley, & Urdan, 1993). According to Ingersoll and Smith (2003), administrative support significantly assists in solving the issue of the teacher shortage.

Teacher turnover is also driven by school conditions (Riggs, 2013). According to Maslow (1954), even veteran teachers need professional, physical, and emotional well-being (Ingersoll, 2003; Johnson & Birkeland, 2002; Spinella, 2003). This enhanced professionalism does not happen by accident, but by design. Teachers must be prepared and given support through the process, so they feel more empowered to make decisions, to realize professional growth, to have more self-efficacy and autonomy, and to recognize their impact on students (Hanushek, 2002; Irvin, 1997). Färber (2010) believes the constant pressure on teachers to increase student achievement along with the lack of administrative support causes dissatisfaction and additional attrition. Those who feel as if they are not given respect are frustrated and resist (Hubbard, Mehan, & Stein, 2006). Therefore, administrators who take a more active role and support teachers prevent attrition (Certo & Englebright Fox, 2002). Thibodeaux et al. (2015) believes administrators must be supportive every day in order to recruit and retain teachers. Kokkinos' (2007) research claimed the first five years as the most critical to teacher burnout. The burnout was attributed to lack of administrative support, which left teachers struggling with classroom management, work overload, and exhaustion (Kokinos, 2007). A proactive administrator can lessen attrition by ensuring teachers feel appreciated and identify conditions known to cause burnout (Kim & Loadman, 1994).

In a study by Shaw and Newton (2014), researchers surveyed teachers to examine the perceived qualities of principals as a servant leader and teacher job satisfaction and retention. The research indicated a strong correlation between principals with servant-

leadership qualities and higher levels of teacher retention and job satisfaction. Principals who show teachers respect and give encouragement positively impact teacher retention through job satisfaction. Danielson (2006) also found administrators need to show teachers respect with consistent support and public encouragement while modeling teacher leadership. Shaw and Newton (2014) also note it does not matter the amount of money spent, or training given, for without leaders who foster and retain great teachers, all the time spent is wasted. Lack of teacher support causes discontent, but a teacher with collegial support is more likely to stay in a district (Luther & Richman, 2009), so the potential for enhanced professionalism lies in interdisciplinary teaming (Irvin, 1997).

Interdisciplinary Teaming

A report by the U.S. Department of Labor recognized teamwork as a necessary skill in the workplace and went so far as to claim it should take precedence in public schools in order for individuals to succeed in the workplace, but also for the success of companies in the U.S. (LaFasto & Larson, 2001). Researchers describe interdisciplinary teaming as the most important component of a middle school (George, 2009; Valentine, Clark, Irvin, Keefe, & Melton, 1993). Teaming is an organizational structure with programs geared toward improving student achievement and the experiences of adolescence during the middle years. These teams may number between two and five core subject areas such as reading, English, math, social studies, and science, and include between 50-150 students on average (Bagwell, 2009). With interdisciplinary teaming comes an additional planning time for collaboration on topics such as student behavior, classroom management, instruction, parent contact, and other student needs that may arise (Bagwell, 2009). Erb and Stevenson (1999) identified the following as effective principles of interdisciplinary teaming:

1. Teams should be small in number for both teachers and students per team.
2. Teachers must have sufficient planning time for meeting as a team and as individuals.
3. Teams should design their students' schedules.
4. Team members should have classrooms confined in one area of the school.
5. Teams should work together for a number of years to be most effective.

With the use of teaming comes a change in the climate of the educational organization. Successful teams gather contributions of high achievers for greater results than what an organization would experience when individuals work alone (Deeprouse & American Management, 2001; Ruggiero, 2007). It is an opportunity for change, not a guarantee (Arhar, Johnson, & Markle, 1989). Wallace (2007) notes that teaming is the “hallmark of the middle school movement” (p. 11). When teachers on a team better understand the needs of a smaller group of students, those students will achieve at a higher level and have better opportunities for growth (Haverback & Mee, 2013; Cook & Faulkner, 2010).

According to George (2011), cooperation is key and crucial to the progress of humans, and the progressive perspective view of education says there is *enough* of everything and we should *share* equally. George (2011) also believes most people are good; therefore, give a child an education and developmentally appropriate experiences and this child will grow to be a good, kind adult (Erb & Doda, 1989; George, 2011). The proponents of the progressive view believe the classroom must be democratic, and everyone involved in the educational process—including students, teachers, school leaders, and parents—form a partnership in learning (George, 2011). A school with teaming provides many of these opportunities to students (Erb & Doda, 1989; George,

2011; George & Alexander, 1993). In Erb and Doda's 1989 study, teachers in a teaming environment displayed a high level of confidence in their own competency, and they also directly linked efficacy to student achievement. The study indicates a connection between team organization and improved student achievement, displayed through a teacher's sense of efficacy (Erb & Doda, 1989). By providing instructional support, such as teaming, middle school principals can positively influence teacher satisfaction and retention (Arhar, Johnson, & Markle, 1989; Irvin, 1997; Youngs, Kwak, & Pogodziński, 2015). Fatima (2012) claimed collaborative work experiences produced positive teachers, and Hare and Heap (2001) view teaming as an effective strategy for retention.

The aspects of an interdisciplinary team provide students with a sense of belonging and give teachers the opportunity to discuss student concerns. Achievement and success are attained through careful assessment using problems and issues relevant to the student, goal setting, and progress and improvement with fellow students and teachers (George, 2011). Boyer (1983) completed a study of secondary schools in America that argues for the curricular cohesion provided by teaming. This task requires regular communication among different subject areas (Boyer, 1983). Alexander and George (1981) proclaimed several positive teacher teaming outcomes including:

- improved student instruction
- integration of all content areas
- discussions of both student progress and curricular evaluations
- improved teacher professional development
- better communication with parents
- positive building climate among teachers and administrators.

In addition to the aforementioned benefits, Pounder (1999) includes:

- increased variety of skill
- closer student relationships
- job satisfaction and increased growth
- increased professional commitment
- improved teacher efficacy when compared to non-teaming teachers

Teaming makes teachers interdependent, because many researchers found most teachers want to work in a group rather than work isolated (Wong, Briton, & Ganser, 2005), and teachers work together to share student information and decision making (Pounder, 1998; Wheeler-Clouse, 1999). Teaming also provides teachers with encouragement and support to be successful partly because interdisciplinary teams share the same group of students (Maeroff, 1993). The teamed teachers plan, teach, and evaluate the curriculum from several different disciplines, and they share the same general area within the school building (George & Alexander, 1993). Before interdisciplinary teaming, teachers rarely gathered together to discuss student concerns, where productive professional conversations were part of the plan (Maeroff, 1993). Maeroff (1993) claimed professional isolation, where teachers were most often teaching alone, was a curse; however, through teaming and a network of support, teachers learned to do things differently.

In a study by Ruggiero (2007), one teacher reported the “creation of a family atmosphere” assisting at-risk students. Research supports the claim teams of core teachers and a common planning time help effectively meet the need of students (Cook & Faulkner, 2010; Haverback & Mee, 2013; Wells & Feun, 2012), and common planning time creates a positive, supportive environment for both teachers and students alike (Haverback & Mee, 2013; Arhar, Johnson, & Markle, 1989). In most cases, higher

teacher morale, collegiality, collaboration, and a unified student support system were reported with the use of teams at the middle school level (Cook & Faulkner, 2010; Haverback & Mee, 2013; Maeroff, 1993; Wells & Feun, 2012).

Gallimore and Ermeling (2010), researchers for Pearson Learning Teams, completed a five-year study and found the most significant contribution of teams was a 41% rise in student achievement. This study identified five keys for effective learning teams: 3-5 members, protocols, a knowledgeable facilitator, stable settings for instruction and learning, and perseverance.

Teaming Successes

Typically, middle schools concentrate mainly on students between the ages of 10 and 14 with grades five through eight and sometimes six through eight (Ruggiero, 2007). Data support interdisciplinary teaming, advisory groups, varied instruction, exploratory programs, and transition programs. These five key components for successful programs in early adolescence must be addressed with appropriate instructional and organizational tools (Cook & Faulkner, 2010; Wilkinson, n.d.).

The use of teacher mentors and teaming is closely related to student achievement and teacher job satisfaction. The teaming environment is one of support, not only for the students but for the teachers as well. An organization with collective efficacy, as termed by Goddard, Hoy, and Woolfolk-Hoy (2004), is an environment where a teacher's professional attitudes and behaviors depend on the school's ability to operate as a team. Interdisciplinary teaming not only assists in clarifying learning goals, but also allows flexibility in teachers and creates a sense of belonging and reduced alienation (Irvin, 1997). Hourcade and Bauwens (2003) proposed teacher teams positively affect the spirit of sharing information rarely viewed in traditional, indirect collaborative approaches.

Rather than a loss of individuality and creativity, this sharing of information is a benefit to student learning as well to the professional growth of teachers (Hourcade & Bauwens, 2003). Flowers, Mertens, and Mulhall (1999) identified five research-based outcomes of teaming. This study noted that schools utilizing teaming know whether teaming is working, and they have data supporting a positive working climate for teachers, more parent contact, positive teacher job satisfaction, and higher student achievement scores. When teaming is implemented along with common planning time of at least four times a week for a minimum of thirty minutes, the outcomes of teaming are magnified (Flowers et al., 1999).

As a result of teaming, an increase in student academic engagement and participation in school activities reduced disciplinary problems (Irvin, 1997). With added supports in place, teachers have higher student achievement (Arhar, Johnson & Markle, 1989; Cook & Faulkner, 2010; Haverback & Mee, 2013; Wallace, 2007). Student needs and a unified support system were viewed as the most important goals in their schools (Cook & Faulkner 2010). Similarly, Goodlad (1984) discussed educational improvements only possible when teachers work in teams.

One important aspect of student achievement and teaming is that all schools should share a common vision and mission (Cook & Faulkner, 2010; Haverback & Mee, 2013; Wells & Feun, 2012). These middle schools presented a positive school climate, commitment to adolescents, adult advocates, family and community partnerships and high expectations (Cook & Faulkner, 2010; Goodlad, 1984, Haverback & Mee, 2013; Wells & Feun, 2012; Wilkinson, n.d.). The school missions and visions were displayed in used as a learning tool for students (Cook & Faulkner, 2010). Moreover, the statements

were printed on student report cards as a testament to stakeholders (Cook & Faulkner, 2010; Haverback & Mee 2013; Wells & Feun, 2012).

Shortcomings of Teaming

Although most research discusses the positive outcomes of teaming and many reasons why teaming is effective for students, several researchers warn there are also difficulties (Gatewood, 1998; Little & McLaughlin, 1993; Shamber, 1999; Thomas, 1992). Little and McLaughlin (1993) point out that not all teacher collaboration is “good” or appropriate (p. 5), and Shamber (1999) lists several “good intentions” that she claims can erode the effectiveness of teaming. Shamber believes diversity of team members can be a benefit by allowing multiple perspectives, but at the same time can cause conflicts due to the balance between individualism and being a team member.

Thomas (1992) discusses several difficulties teams face including uncertainty of roles, lack of processes and protocol knowledge, and lack of support by administrators. Lack of support includes lack of common planning time (Thomas, 1992). Schamber reiterates the need for time and effort to develop relationships among team members. Many organizations begin with curriculum rather than with building team relations (Schamber, 1999). She believes team time must be scheduled before curriculum discussions take place, and before the team works with students, “It is vital that the team discuss the more practical aspects of what it means to work together” (Shamber, 1999, p. 18).

Teams must be effectively assembled. Kruse and Louis (1997) highlight the placement of team members and caution against different personalities and teaching styles as they cause heightened incompatibility. After the discussion of management details, the team may begin discussions of curricular planning and student concerns

(Schamber, 1999). Kohn (1999) states that leaders need to realize “simply putting people in groups does not ensure cooperation...and organizational commitment is required” (p. 188). Shamber (1999) also claims, “Teaming puts teachers together in a professional relationship unlike any other in education” (p. 18). Team members unintentionally put the team at risk by undermining the team’s effectiveness and trust. Among others in *Surviving Team Teaching’s Good Intentions*, Shamber (1999) stresses team meetings should never serve as an emotional support group for members. “Gripe” or “therapy sessions” should take place outside these meetings.

Another pitfall of teaming is the need to refrain from implementing a new and improved decision without total team approval. This is echoed by LaFasto and Larson (2001) when these researchers say dysfunctional relationships with others outside the team for the purpose of maneuvering around those who could fracture the team’s positive efforts must be avoided. Many decisions made by a team take much thought, and some decisions almost none. Making a change without other team members’ knowledge shows lack of support for the team. This could compromise the team’s objective (Lafasto & Larson, 2001). Not only do these changes confuse students, but other teammates (Shamber, 1999).

As previously stated, diversity can be a positive result of teaming; however, Schamber (1999) also believes it may cause disagreements among team members, and decisions should be based on issues rather than people. All members should take an active part in discussions rather than staying out of a disagreement. Even those team members who do not feel strongly about an issue should still contribute to the conversation surround the decision. When one team member fails to participate in team decisions the nonparticipant becomes part of the problem rather than the solution

(Schamber, 1999). Communication remains the utmost importance in keeping a good relationship within the team (Dee & Henkin, 2001). Conflict must be handled appropriately to achieve positive student outcomes (Donaldson, as cited by Chavarria, 2010). Although seeking outside advice about unresolved team issues appears a positive solution, it may be perceived as a negative by other teammates (Schamber, 1999). Many people would rather details discussed in team meetings remain private, than ask others to join in the conversation. Some may see this as disloyalty to the team (Schamber, 1999). Failure to reach a consensus can cause frustrations and anger for other members.

Shamber (1999) also notes teachers must remain clear about whether they speak for themselves or for the entire team, since not all communication on team matters are presented in a formal manner. Some researchers have also stated disappointment when members choose to discuss team issues in hallways and carpools rather than during team meetings (LaFasto & Larson, 2001). Teachers on teams may form close bonds and relationships, but they should never assume to speak for the entire group without prior conversations. This includes both parent and administrative meetings. Failure to adhere to this policy could undermine the trust of team members (Schamber, 1999).

Another caution Schamber (1999) gives is careful consideration to team planning sessions. No one team member should make side-decisions for the entire team. The best interests of the student must always be considered, and no announcements should be made without total team buy-in even if the new and improved decision is better than the old. This confuses students and does not present a united team front but rather bad procedure (Schamber 1999). For successful teaming, a professional atmosphere of sharing ideas and problem solving must exist (Schamber, 1999).

Where Schamber focused on the inner workings of team dynamics, Gatewood (1998) voiced concern for integrated teaching and whether it discounted deeper, subject-specific knowledge deemed necessary and essential for a specialization such as engineering, medicine and law. Others agree when theme teaching unrelated topics, there seems to be superficial coverage of information that misses the idea of curriculum integration and contains busy work and activities created specifically in an attempt to link unrelated subjects (Barton & Smith, 2000; Brophy & Alleman, 1991).

Summary

The number of reasons teachers leave education is vast. Some former teachers say they were not prepared for the workload or the lack of respect from their students, other teachers, and parents (Boreen, Johnson, Niday, & Potts, 2009; Chong & Low, 2009; Darling-Hammond, 2003; Kopowski, 2008). Although no one enters the teaching profession with the idea of becoming a millionaire, it is still necessary to earn a livable wage (Darling-Hammond, 2003). Darling-Hammond (2003) reported some teachers who left did so because they could not afford to stay. In addition, other areas of concern that affect job satisfaction include depression, isolation, and hostile school climates (Mendel, 1987). Since the field of education is littered with studies on attrition, there must be a solution.

CHAPTER THREE: METHODOLOGY

Introduction

According to the work of many researchers, teaming positively impacts the academic achievement of students (Arhar, Johnson & Markle, 1989; Cook & Faulkner, 2010; Haverback & Mee, 2013; Wallace, 2007). Positive teacher morale is a result of student success (Maeroff, 1993; Wheeler-Clouse, 1999; Wilson, 2007). The problem of teacher attrition affects schools across the nation. It is also important to note it is not a new problem and not isolated to the United States.

The purpose of this study was to better understand the difference in attrition between middle schools who practice teaming and those who do not. The researcher examined attrition rates for each school to determine the following:

1. What impact does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming?
2. What are the perceived reasons for teacher attrition?

Research Design

A mixed methods study was used in order to provide a more robust and broader perspective (Creswell, 2003). Both qualitative and quantitative data were collected and analyzed. For this study, the researcher examined one independent variable with two levels: middle schools using teaming and middle schools that do not use teaming. The dependent variable was the attrition rate at each school for each year in the five-year span. The researcher also included an analysis of principal perceptions of why teachers left. This mixed method allowed the researcher to delve into the perceived reasons for attrition during a five-year span. A short answer question was utilized to attain reasons for attrition other than teaming.

Surveys were submitted to all 270 Missouri public middle school principals including all grades 6-8. The study results were disaggregated by:

1. The length of tenure of the building principal,
2. The use or non-use of teaming,
3. The teacher attrition rate for 2014, 2015, 2016, 2017, and 2018,
4. The perceived reasons teachers left.

Research Questions

RQ1: What impact does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming?

Sub Question 1: What was the difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that have no teaming?

Sub Question 2: What was the difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that have no teaming?

Sub Question 3: What was the difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that have no teaming?

Sub Question 4: What was the difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that have no teaming?

Sub Question 5: What was the difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that have no teaming?

RQ2: What are the perceived reasons for teacher attrition?

Null Hypotheses

H₀₁: There is no statistically significant difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that do not have teaming.

H₀₂: There is no statistically significant difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that do not have teaming.

H₀₃: There is no statistically significant difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that do not have teaming.

H₀₄: There is no statistically significant difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that do not have teaming.

H₀₅: There is no statistically significant difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that do not have teaming.

Participants (Selection/Sampling)

The subjects asked to participate in this study were principals in 270 Missouri public middle schools including all grades 6-8. The researcher attempted to gather data from a large sample size in hopes of collecting data encompassing all demographic areas in the state of Missouri. The researcher sent an electronic invitation to participate in the survey (Appendix B). All those who agreed to participate were then emailed an electronic survey and an informed consent (Appendix A and C). These principals were asked:

1. How long have you been the principal of your current building?
2. Do you use teaming in your middle school?
3. If so, how long have you used teaming?
4. What was your teacher turnover rate for the 2013-2014 school year?
5. What was your teacher turnover rate for the 2014-2015 school year?
6. What was your teacher turnover rate for the 2015-2016 school year?
7. What was your teacher turnover rate for the 2016-2017 school year?
8. What was your teacher turnover rate for the 2017-2018 school year?
9. Please list the top three reasons teachers decided to leave.
10. In what way do you perceive that teaming had an impact on those teachers who left?

Participants included in the research were all principals in Missouri middle schools to include sixth through eighth grades only. Principals of all 270 Missouri middle schools were contacted to request permission to send survey. Of 270 principals contacted, 86 completed the survey for a return rate of 31.85%.

The researcher chose not to include middle schools classified as anything other than sixth through eighth grades, magnet, private, charter, or online schools. In order to provide valid results, a survey was sent to all middle school principals with grades six through eight in the state of Missouri who agreed to participate. For the protection of all participants, data were collected through an anonymous digital format.

In hopes of an increase in response rate, the researcher utilized email addresses collected solely for the purpose of a drawing for a gift card. Each respondent was given the option of entering an email address in a separate survey, which in no way violated the

confidentiality of the respondent. The winner was acknowledged using the email address provided by the participant in the survey.

Participants had no known risk. Names of schools and participants were confidential and could remove themselves from the study at any time. All responses were voluntary. Data from this study were kept on a password protected computer, and files were deleted once data were analyzed.

The survey was used to gather basic information regarding whether teams were in place at each school, how long they were in place, and to what each principal attributed to the attrition rate. Question Pro software was utilized because this program allowed for easy access to the data for the researcher as well as for a convenient way for respondents to answer the questions.

In accordance with the guidelines of Southwest Baptist University regarding protection of human participants, a request for review was submitted to the Research Review Board for approval to send a survey to 270 current principals of middle schools in the state of Missouri. After receiving RRB approval, participant recruitment and data collection began.

Survey Rationale

A survey was utilized in this study (Appendix A). Because there was no existing survey to address the research question, a survey tool was developed by the researcher. The survey was based on information gathered in the literature review. The survey consisted of ten questions. In order to validate the attrition questions, the first question simply asked for the respondent's number of years as present principal. The second and third questions asked if teaming was used in the middle school. An answer of "no" skipped the next question. With an answer of "yes" the respondent was asked for length

of time using teaming. This allowed the researcher to identify two groups: those schools who used teaming, and those schools who did not use teaming. The next five questions asked for the teacher turnover rate in 2014, 2015, 2016, 2017, and 2018. Responses to all questions 1-8 answered RQ1 and Sub 1-5.

Question 9 asked for the top three perceived reasons why teachers left. The last question was used as a qualitative follow up to help the researcher identify reasons other than teaming for the teacher attrition rate and answered RQ2 (Bogdan & Biklen, 1982). According to Bogdan and Biklen (1982), qualitative research includes information which identifies the “hows” and “whys” to the researcher and conveys meaning to the study. The answers to the follow up question allowed the researcher to code the responses into the categories found in the literature review, thus allowing the researcher to connect the following to teacher attrition: teacher job satisfaction, teacher self-efficacy, teacher salary, teacher autonomy, teacher induction and mentorship, student behavior problems, and administrative support.

Data Analysis

An independent samples *t*-test was performed because it is the most appropriate to the study. In order to address the main research question, what difference does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming, a two-tailed independent sample *t*-test was performed using SPSS with alpha=.05. This test was used to determine whether there was a statistically significant difference in teacher attrition between schools that use teaming and those who do not use teaming, whereby the researcher would reject or fail to reject the null hypothesis (Pelham, 2013).

Assumptions for *t*-test include: stating that the independent variable has two levels: schools who use teaming, and schools who do not use teaming; verifying that the variances of the scores in each group is approximately equal to one another; and asserting that the dependent variable of teacher attrition rates during a five-year span is continuous.

Once the *t*-test was complete, the researcher then coded the responses to the follow up question into the categories found in the literature review: teacher job satisfaction, teacher self-efficacy, teacher salary, teacher autonomy, teacher induction and mentorship, student behavior problems, and administrative support.

Research Procedures

Utilizing the Missouri Department of Elementary and Secondary Education (DESE) website, a downloadable list of all middle schools was generated. The invitation to participate was sent to all 270 Missouri middle school principals. Upon a “yes” response to participate, a link to the survey was sent. All principals were emailed a link to the questionnaire (Appendix A). All respondents were voluntary. Questionnaires were electronically administered using Question Pro software to gather the data. An outside site was used to collect email addresses of those who wished to be included in the incentive gift card drawing. In addition to the survey tool (Appendix A), the email contained a copy of a letter of introduction (Appendix B), and the RRB approved Informed Consent form (Appendix C). The survey tool remained open for 10 days. A reminder email was also sent to encourage a higher response rate.

The data for this study were gathered using an anonymous survey questionnaire with results saved in a password protected file on the researcher’s personal computer. All printed copies of data were destroyed, and files were deleted after analysis.

Instrumentation

Those included in the research were all principals of middle schools including 6-8 grades only, in the state of Missouri. The researcher sent an invitation to participate, then a link to an electronic questionnaire to principals of all 270 current Missouri middle schools to investigate the impact teaming has on attrition. These principals were asked:

1. How long have you been the principal of your school?
2. Do you use teaming in your middle school? If yes,
3. How long have you used teaming in your school?
4. What was your teacher turnover rate in 2014, 2015, 2016, 2017, and 2018?
5. Please list the top three reasons teachers decided to leave.
6. In what way do you perceive teaming had an impact on those teachers who left?

Summary

After an in-depth review of both present and historical literature for teacher attrition and interdisciplinary teaming, a questionnaire was sent to willing participants of Missouri public middle schools including grades six to eight. The survey instrument was used to complete a mixed methods study to determine whether interdisciplinary teaming has an impact on teacher attrition. A two-tailed independent sample *t*-test was performed using SPSS. The researcher then coded the responses to the follow up question, in accordance with Bogdan and Biklen (1982), into the categories found in the literature review: teacher job satisfaction, teacher self-efficacy, teacher salary, teacher autonomy, teacher induction and mentorship, student behavior problems, and administrative support.

CHAPTER FOUR: FINDINGS

Introduction

Chapter Four will present the analyzed data to include results from the survey. Using data tables and a narrative, the researcher will indicate the value of the research and recommendations for moving forward. Currently, there is a lack of research and information on teaming and how it impacts teacher attrition in Missouri at the middle school level. The purpose of this study was to determine the difference in attrition between middle schools who practice teaming and those that do not. A mixed methods study was used in order to provide a more robust and broader perspective.

The researcher provided a detailed list of procedures for conducting this study in Chapter Three including the participants and the selection process. A complete description of the research setting pertaining to Missouri middle schools that use teaming and those that do not use teaming was also described. An outline of the research design and data treatment was also discussed. The invitation to participate was sent to all 270 Missouri middle school principals. Upon a “yes” response to participate, a link to the survey was sent. All results from the survey were uploaded into the IBM Statistical Package for Social Sciences (SPSS) software program for analysis. In addition, all descriptive data from the open-ended question were presented in a simple and measurable way. This chapter presents the data and gives insight into the reasons why teacher attrition occurs. The researcher addressed the following questions:

RQ1: What impact does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming?

Sub Question 1: What was the difference in teacher attrition rate in the school year 2013-2014 between schools that have teaming and schools that do not have teaming?

Sub Question 2: What was the difference in teacher attrition rate in the school year 2014-2015 between schools that have teaming and schools that do not have teaming?

Sub Question 3: What was the difference in teacher attrition rate in the school year 2015-2016 between schools that have teaming and schools that do not have teaming?

Sub Question 4: What was the difference in teacher attrition rate in the school year 2016-2017 between schools that have teaming and schools that do not have teaming?

Sub Question 5: What was the difference in teacher attrition rate in the school year 2017-2018 between schools that have teaming and schools that do not have teaming?

RQ2: What are the perceived reasons for teacher attrition?

In an effort to answer the previously mentioned questions, the researcher addressed the following null hypotheses:

H₀₁: There is no statistically significant difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that do not have teaming.

H₀₂: There is no statistically significant difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that do not have teaming.

H₀₃: There is no statistically significant difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that do not have teaming.

H₀₄: There is no statistically significant difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that do not have teaming.

H₀₅: There is no statistically significant difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that do not have teaming.

The researcher used Question Pro to distribute the survey (Appendix A) to principals in all public Missouri middle schools willing to participate. For the purpose of this study, the researcher chose to survey only those middle schools described by Missouri Department of Elementary and Secondary Education (DESE) as housing grades 6, 7, and 8. The use of Question Pro software allowed the researcher not only to send the survey digitally, but also to collect data automatically. Only those principals who agreed to participate in the study were sent the survey (Appendix A) after giving their consent to participate (Appendix B). All data were uploaded to the IBM SPSS program for complete analysis. Data from the survey results included 86 responses to 270 invitations to participate. All responses were downloaded from Question Pro and added to an Excel sheet. The researcher cleaned and combined the data in Excel for easier import into analysis software.

Assumptions for *t*-test included stating that the independent variable had two levels, schools who use teaming, and schools who do not use teaming verifying that the variances of the scores in each group was approximately equal to one another; and

asserting that the dependent variable of teacher attrition rates during a five-year span was continuous.

Data Analysis and Findings

When completing the surveys, the participants were asked questions about how long they had been the principal of their current building, whether they used teaming, and, if so, for how long. This assisted the researcher in analyzing data for RQ1. Respondents were also asked the turnover rate for school years 2013-2014, 2014-2015, 2015-2016, 2016-2017, and 2017-2018. These questions assisted in answering Sub Questions 1-5. The final questions requested the top three reasons teachers decided to leave and in what way each perceived that teaming had an impact on those teachers who left. These questions assisted in answering RQ2. Of the 270 invitations sent, 86 principals participated for a return rate of 31.85%. The researcher analyzed the data for 46 schools that use teaming and 40 schools that do not use teaming.

In order to address the first research question, what difference does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming, a two-tailed independent sample *t*-test was performed to determine whether the mean attrition rate differed significantly for a group of 46 schools that used teaming and 40 schools that did not use teaming. The assumption of homogeneity of variance was assessed by the Levene's test. The independent samples *t*-test was used to determine whether there was a statistically significant difference in teacher attrition between schools that use teaming and those who do not use teaming, whereby the researcher would reject or fail to reject the null hypothesis (Pelham, 2013). Further analysis was completed using the responses to the open-ended questions in order to code answers.

Sub Question 1. What was the difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that do not have teaming?

H₀₁: There is no statistically significant difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that do not have teaming.

Table 1

Group Statistics for 2013-2014

Year	Schools	N	Mean	Std. Deviation	Std. Error Mean
2013-2014	Teaming	46	2.46	1.471	.217
	No teaming	40	2.85	1.578	.249

Table 2

Independent Samples Test for 2013-2014

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sign. 2-tailed	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
2013-2014	Eq. variance assumed	1.105	.296	-1.2	84	.235	-.393	.329	-1.048	.261
	Eq. variance not assumed			-1.19	80.42	.237	-.393	.331	-1.051	.264

The assumption of homogeneity of variance was assessed by the Levene's test, $F = 1.105, p = .296$; this indicated no significant violation of the equal variance assumption;

therefore, the pooled variances version of the t -test was used. The mean attrition rate of 2013-2014 between schools that use teaming and schools that do not use teaming had no significant difference, $t(84) = -1.196, p = .235$, two-tailed. The researcher failed to reject the null hypothesis.

Sub Question 2. What was the difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that do not have teaming?

H₀₂: There is no statistically significant difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that do not have teaming.

Table 3

Group Statistics for 2014-2015

Year	Schools	<i>N</i>	Mean	Std. Deviation	Std. Error Mean
2014-2015	Teaming	46	2.48	1.531	.226
	No teaming	40	2.68	1.685	.266

Table 4

Independent Samples Test for 2014-2015

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		<i>F</i>	Sig.	<i>t</i>	<i>df</i>	Sign. 2-tailed	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
2014-2015	Eq. variance assumed	.826	.366	-.567	84	.572	-.179	.347	-.887	.493
	Eq. variance not assumed			-.563	79.55	.575	-.179	.349	-.892	.498

The assumption of homogeneity of variance was assessed by the Levene's test, $F = .826, p = .366$; this indicated no significant violation of the equal variance assumption; therefore, the pooled variances version of the t -test was used. The mean attrition rate of 2014-2015 between schools that use teaming and schools that do not use teaming had no significant difference, $t(84) = -.567, p = .572$, two-tailed. The researcher failed to reject the null hypothesis.

Sub Question 3. What was the difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that do not have teaming?

H_{03} : There is no statistically significant difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that do not have teaming.

Table 5

Group statistics for 2015-2016

	Schools	N	Mean	Std. Deviation	Std. Error Mean
2015-2016	Teaming	46	2.26	1.497	.221
	No teaming	40	2.58	1.483	.234

Table 6

Independent Samples Test for 2015-2016

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sign. 2-tailed	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
2015-2016	Eq. variance assumed	.764	.385	-.975	84	.332	-.314	.322	-.955	.327
	Eq. variance not assumed			-.975	82.56	.332	-.314	.322	-.955	.326

The assumption of homogeneity of variance was assessed by the Levene's test, $F = .764$, $p = .385$; this indicated no significant violation of the equal variance assumption; therefore, the pooled variances version of the t -test was used. The mean attrition rate of 2015-2016 between schools that use teaming and schools that do not use teaming had no significant difference, $t(84) = -.975$, $p = .332$, two-tailed. The researcher failed to reject the null hypothesis.

Sub Question 4. What was the difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that do not have teaming?

H₀₄: There is no statistically significant difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that do not have teaming.

Table 7

Group Statistics for 2016-2017

	Schools	N	Mean	Std. Deviation	Std. Error Mean
2016-2017	Teaming	46	2.46	1.870	.276
	No teaming	40	2.63	1.628	.257

Table 8

Independent Samples Test for 2016-2017

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sign. 2-tailed	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
2016-2017	Eq. variance assumed	.026	.873	-.442	84	.659	-.168	.381	-.926	.589
	Eq. variance not assumed			-.447	89.99	.656	-.168	.377	-.919	.582

The assumption of homogeneity of variance was assessed by the Levene's test, $F = .026, p = .873$; this indicated no significant violation of the equal variance assumption;

therefore, the pooled variances version of the t -test was used. The mean attrition rate of 2016-2017 between schools that use teaming and schools that do not use teaming had no significant difference, $t(84) = -.442, p = .659$, two-tailed. The researcher failed to reject the null hypothesis.

Sub Question 5. What was the difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that do not have teaming?

H_{05} : There is no statistically significant difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that do not have teaming.

Table 9

Group statistics for 2017-2018

	Schools	N	Mean	Std. Deviation	Std. Error Mean
2017-2018	Teaming	46	2.39	1.639	.242
	No teaming	40	2.70	1.698	.268

Table 10

Independent Samples Test for 2017-2018

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		<i>F</i>	Sig.	<i>t</i>	<i>df</i>	Sign. 2-tailed	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower		Upper
2017-2018	Eq. variance assumed	.130	.719	-.857	84	.394	-.309	.360	-1.025	.408
	Eq. variance not assumed			-.855	81.47	.395	-.309	.361	-1.027	.410

The assumption of homogeneity of variance was assessed by the Levene's test, $F = .130, p = .719$; this indicated no significant violation of the equal variance assumption; therefore, the pooled variances version of the t -test was used. The mean attrition rate of 2017-2018 between schools that use teaming and schools that do not use teaming had no significant difference, $t(84) = -.857, p = .394$, two-tailed. The researcher failed to reject the null hypothesis.

Open-Ended Questions

The survey also included open-ended questions. The researcher included these questions in order to identify principals' perceptions. RQ2: What are the perceived reasons for teacher attrition?

The first question established length of time as principal. The second identified the level of the independent variables: schools who use teaming and schools that do not

use teaming. The two groups were approximately equal to one another with 46 answering yes, and 40 answering no.

Question 9 asked for the top three reasons teachers decided to leave. After reading the respondents' comments, the researcher conducted a brief qualitative analysis to identify common themes such as low salary, promotions, retirement, family relocation, leaving the profession, difficult students, family opportunities and non-renewal of contracts. The most commonly cited reasons were low salary, retirement, relocation of family, and promotions.

The researcher also analyzed common themes from Question 10 that asked in what way the principal perceived teaming had an impact on those teachers who left. Most of the principals who do not use teaming in their buildings said that teaming had no impact on those teachers who left. One principal stated, "Many left because they were overloaded with as many as seven class preps." Another said, "I would love to use teaming, but our elective structure does not allow for it." Still another remarked, "I would like to use teaming, but due to the size of the school and lack of proper certifications we cannot." One respondent was forced to cut teaming when the tax levy did not pass for ten years. Lack of funding made teaming an impossibility.

Those principals who do use teaming had mostly positive remarks. One stated, "Many stay due to camaraderie and support of a tight knit team. It makes leaving more difficult since teachers feel like they are leaving family members." Another thought that the use of teams actually helped with retention due to the opportunity to share the workload. The collaboration and layers of support provided by teaming creates a beneficial environment to both teachers and students. A respondent also claimed it was an

attraction to new hires. Interestingly, one principal pointed out the need for fidelity in order for teaming to be successful.

Conclusion

This chapter provided a description of the findings of this study. Survey results of 86 respondents were both qualitatively and quantitatively analyzed to answer the research questions. Two-tailed independent samples *t*-tests were utilized to determine whether to reject or fail to reject the null hypotheses. The researcher also analyzed open-ended survey questions to identify common themes. Chapter Five will give a detailed summary of conclusions of the research study and provide recommendations for future research in the area of teaming and teacher attrition.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to determine the difference in teacher attrition between middle schools who practice teaming and those that do not. A mixed methods approach was used in order to provide a broader perspective to the study. School administrators can no longer sit back and watch as effective teachers leave the profession. As presented by McKinney et al. (2007), school leaders must understand teacher retention and why some educators are successful and continue to teach in schools with staffing difficulties. Nationally, the cost of teacher attrition is over \$7 billion per year (Feng, 2010; Kapadia, Coca, & Easton, 2007). Attrition not only costs the nation money, but according to Flynt and Morton (2009), teacher turnover has an effect on student outcomes, so school leaders must examine the problem.

Data were analyzed to ascertain whether teachers in a teaming environment would choose to stay in the field of education. This study was conducted in hopes to gain more knowledge on whether the use of interdisciplinary teaming impacts teacher attrition in Missouri middle schools. As supported by the literature review, teacher job satisfaction, teacher salary, teacher preparation, and administrative support have a substantial impact on teacher attrition. When seasoned teachers leave, many schools replace these veterans with untrained and sometimes unlicensed individuals (Alliance for Excellent Education, 2005; Clotfelter, Ladd, & Vidgor, 2006; Howard, 2003). This does not always reap positive results, and lower student performance may result (Pearman & Lefever-Davis, 2012). Additionally, the researcher applied both Maslow's (1959) and Herzberg's (1987) theories which state that a teacher must have adequate space and appropriate equipment

in order to meet the needs of students. Teacher's needs include those such as adequate planning time, communication, and information meetings.

Research Questions

RQ1: What impact does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming?

Sub Question 1: What was the difference in teacher attrition rate in the school year 2013-2014 between schools that have teaming and schools that do not have teaming?

Sub Question 2: What was the difference in teacher attrition rate in the school year 2014-2015 between schools that have teaming and schools that do not have teaming?

Sub Question 3: What was the difference in teacher attrition rate in the school year 2015-2016 between schools that have teaming and schools that do not have teaming?

Sub Question 4: What was the difference in teacher attrition rate in the school year 2016-2017 between schools that have teaming and schools that do not have teaming?

Sub Question 5: What was the difference in teacher attrition rate in the school year 2017-2018 between schools that have teaming and schools that do not have teaming?

RQ2: What are the perceived reasons for teacher attrition?

In an effort to answer the previously mentioned questions, the researcher addressed the following null hypotheses:

H₀₁: There is no statistically significant difference in teacher attrition rate in the 2013-2014 school year between schools that have teaming and schools that do not have teaming.

H₀₂: There is no statistically significant difference in teacher attrition rate in the 2014-2015 school year between schools that have teaming and schools that do not have teaming.

H₀₃: There is no statistically significant difference in teacher attrition rate in the 2015-2016 school year between schools that have teaming and schools that do not have teaming.

H₀₄: There is no statistically significant difference in teacher attrition rate in the 2016-2017 school year between schools that have teaming and schools that do not have teaming.

H₀₅: There is no statistically significant difference in teacher attrition rate in the 2017-2018 school year between schools that have teaming and schools that do not have teaming.

Summary of Methods

The researcher used a mixed method approach in data collection and analysis. After approval of the Research Review Board (RRB) was received in October of 2018, data collection began using a Question Pro survey developed by the researcher in conjunction with members of the researcher's committee. The quantitative data were analyzed using the IBM Statistical Package for Social Sciences (SPSS) software. The researcher conducted an independent samples *t*-test to determine significance and whether to reject or fail to reject the null hypotheses.

Principals from all public Missouri middle schools identified by Department of Elementary and Secondary Education as housing grades 6, 7, and 8 were invited to participate in the survey. All 270 principals had an equal opportunity to participate. Eighty-six principals of the 270 responded to the invitation. The survey response rate was 31.85% of the total eligible participants. Each of the questions for turnover rate was used to answer a sub research question.

Using the DESE website, the researcher obtained an email list of middle school lead administrators. The researcher sent a digital request to each of these administrators asking for participation in the study. The survey was initially open for ten business days. A reminder email was sent to those administrators who had not yet responded after the initial ten-day period. Because the effect size of the study was small, an additional five business days were added to gain more responses.

Limitations, Delimitations, and Design Controls

The researcher experienced several limitations during the process of this study. There was little control over the response rate. The email list obtained from DESE contained 18 invalid email addresses. Even though the researcher sent out invitations to participate, sent follow-up emails, and sent a reminder email, the researcher could not control the return rate. Several larger districts either refused to participate or required a lengthy process for approval from the superintendent. The researcher limited the survey to only principals of public middle schools to include grades 6, 7, and 8 in the state of Missouri. No teachers were surveyed. The design controls included reminder emails to administration, simple participation process, and anonymous collection of data.

Summary of Findings

This research was conducted to determine whether there was a difference in teacher attrition between schools that use teaming and schools that do not use teaming. Although a considerable amount of research has been completed for both middle school teaming (Bagwell, 2009; Cook & Faulkner, 2010; Fatima, 2012; George, 2009; Haverback & Mee, 2013; Irvin, 1997; Lafasto & Larson, 2001; Luther & Richman, 2009; Wong, Briton, & Gasner, 2005), and teacher attrition (Kim & Loadman, 1994; Riggs, 2015; Shaw & Newton, 2014; Thibodeaux et al., 2015), there has been little information gathered on whether teaming impacts teacher attrition at the middle school level. Using the information obtained in the literature review, the researcher developed the two main research questions. For the purpose of this study, teaming was defined as the pairing up of a group of teachers with a group of students, where the teachers instruct their disciplinary curricula (Ruggiero, 2014). Teaming and interdisciplinary teaming were interchanged. Teacher attrition, for the purpose of this study, was defined as those teachers who choose not to continue to teach in a classroom in the field of education, move to another position, leave their current district, and/or who leave the field of education for another occupation (Imazeki, 2005; Ingersoll, 2001, Smith & Ingersoll, 2004).

Upon examination of the final survey results, the researcher failed to reject each of the null hypotheses. There was no significant difference between teacher attrition rates with schools using teaming and schools that did not use teaming. The researcher also examined the descriptive data and identified common themes in the open-ended questions. The findings of this study were coded into the themes of the literature review:

teacher job satisfaction, teacher self-efficacy, teacher salary, teacher autonomy, teacher induction, student behavior problems, and administrative support.

Conclusions

The purpose of this study was to determine if there was a difference in teacher attrition in Missouri middle schools that use teaming and those that do not use teaming. All Missouri public middle school principals with grades 6, 7, and 8 were invited to participate in the survey. These principals were asked for teacher turnover rates for a five-year span to include 2013-2018 school years. The survey was sent electronically using Question Pro. Along with the statistical findings presented in Chapter Four, the researcher asked open-ended questions to illustrate reasons for teacher attrition. Principals were asked to list the top three reasons teachers decided to leave. The perceived reasons are explained in the sections below.

Research Question 1 Conclusions

The first research question was as follows: What impact does teaming have on teacher attrition in schools that have teaming and schools that do not have teaming? Because the researcher needed five continuous years of data, this research question included five sub questions to account for each of the five school years beginning in 2013 and ending in 2018. An independent samples *t*-test was run to determine whether a statistically significant relationship could be identified. The data indicated *p* values of 0.296, 0.366, 0.385, 0.873, and 0.719, all of which were above the .05 level, concluding there was no statistical difference in the attrition rate between schools that use teaming and schools that do not use teaming. The researcher failed to reject the null hypotheses.

Although the data shows no statistical difference in the attrition rates, the researcher wanted to know if the principals perceived teaming impacted those teachers

who left. The follow-up was also used to answer this research question, because statistical data alone did not provide the researcher with enough information. Common themes were analyzed from the open-ended question that asked in what way the principal perceived teaming had an impact on those teachers who left. In examining the answers from principals who use teaming, many reported that teachers did not leave because teaming was part of the expectation, but rather for reasons listed below.

As supported by Erb and Doda (1989), principals who use teaming reported positive impacts such as stronger bonds “like a family and collegial support.” In agreement was the study by Hare and Reap (2001). Principals claimed teaming attracted new hires to their districts, and several claim teaming helps retain teachers because they have a greater sense of connection with an extra layer of support. One stated, “Many stay due to camaraderie and support of a tight knit team. It makes leaving more difficult since teachers feel like they are leaving family members.” Another respondent thought that the use of teams actually helped with retention due to the opportunity to share the workload. The collaboration and layers of support provided by teaming creates a beneficial environment to both teachers and students. Similar to the study of Shamber (1999), one principal pointed out the need for fidelity in order for teaming to be successful.

Most of the principals who do not use teaming in their buildings said that teaming had no impact on those teachers who left. One principal stated, “Many left because they were overloaded with as many as seven class preps.” Another said, “I would love to use teaming, but our elective structure does not allow for it.” Still another remarked, “I would like to use teaming, but due to the size of the school and lack of proper certifications we cannot.” One respondent was forced to cut teaming when the tax levy did not pass for ten years. Lack of funding in the district made teaming an impossibility.

Research Question 2 Conclusions

The second research question was as follows: What are the perceived reasons for teacher attrition? Of the 86 complete responses, the answers to this open-ended question could be interpreted in fifteen different categories. The most often cited reasons for teacher attrition were low salary, retirement, relocation of family, and promotions. The researcher conducted a brief qualitative analysis to identify common themes such as low salary, promotions, retirement, family relocation, leaving the profession, difficult students, administrative support, family opportunities, and non-renewal of contracts which aligned with the literature review as the most prevalent reasons for teacher attrition (Gonzalez, Brown, & Slate, 2008; Grissom, 2011; Kopp, 2011; Mitchell, 2013; Pearman & Lefever-Davis, 2012; Thibodeaux, Labat, Lee, & Labat, 2015; Weiss & Weiss, 1999).

Respondents noted a number of teachers left education because they were unprepared for the workload of as many as seven preps, and “teaching wasn’t what they thought it would be.” These results agreed with Chong and Low (2009) and Kopowski (2008) who found many teachers left due to the workload and lack of respect. Over half the respondents gave salary as a reason the teachers left. Darling-Hammond (2003) also gave salary and lack of mentoring support for reasons teachers leave early in their careers. While Grissom (2011) found pay impacted the turnover rate, several other studies have shown that although salary is important, it is not a major contributing factor determining why teachers leave (NCES, 1997; Morse & Mujtaba, 2008; Scafidi, Sjoquist, & Stinebrickner, 2003).

As in Ingersoll’s (2001) study, there was a large number of retirements reported, but retirement was lower than that of other reasons. Several responses noted lack of

support as a reason the teachers left. Support is necessary for personal and professional growth, which includes appropriate professional development (Cannon, 2013).

Professional Implications

This study adds quantitative value to the body of research and supports the idea that teaming provides a number of positive experiences for teachers. While the statistical data of the study indicated there was no significant difference in teacher attrition in schools that use teaming and schools that do not use teaming, the open-ended questions concurred with the themes of the literature review. Based on the findings from this study, teaming is not an excuse for teacher attrition, but rather a way for teachers to feel they have a place in the school and a voice outside the classroom.

Understanding the dynamics of a teaming atmosphere, most principals who use teaming believe it is an asset, and most of the principals who do not use teaming believe it would play a positive role in the relationships in their building. The fact that teachers have a greater sense of connection is a major contributing factor preventing teacher attrition. Because the cost of attrition is over \$7 billion per year, attrition must be addressed (Feng, 2010; National Commission on Teaching and America's Future, 2003).

This study's findings agree with Ingersoll (2001) who suggested districts should reallocate resources to programs providing support for both teachers and other areas noted as causes for attrition. Providing teachers with support and a voice in decision making does not cost the district anything. In districts where there was no teaming, several found ways to compensate. Even though they did not use teaming in the traditional sense, they still used professional development time to discuss ways to assist students in achievement and behavior. The smaller districts should share the information and strategies with other schools.

Recommendations for Further Research

The following recommendations will add to the body of research examining teacher attrition and teaming.

1. Further research should be conducted to include teachers rather than administrators. Exit surveys are not always as accurate if the building principal conducts the interview. A negative exit-interview would not be conducive to a future positive reference.
2. A replication of this study using private schools, charters, and alternative schools would also benefit the body of research.
3. A study completed comparing categories such as school poverty levels, minority rates, age, gender, and/or school size would add to the body of research.
4. A study including questions for teachers asking why teaming draws them to a particular school.

Summary

The focus of this study was the impact of teaming on teacher attrition in Missouri middle schools. As previously stated, education is a “revolving door” that costs the nation billions of dollars every year and impacts student success and achievement (Ingersoll, 2001; Boyd, Grossman, Lankford, Loeb, Wyckoff, 2009). American public education is suffering a loss of highly qualified teachers (Watlington et al., 2010). Each year, thousands of teachers leave the profession, and according to many researchers, as many as 50% leave within the first few years (Carver-Thomas & Darling-Hammond, 2017; Darling-Hammond, 2003; Gray & Tai, 2015; Weiss & Weiss, 1999). The impact and dollars alone are cause for concern.

The findings of this study were coded into the themes of the literature review: teacher job satisfaction, teacher self-efficacy, teacher salary, teacher autonomy, teacher induction, student behavior problems, and administrative support. Although there was no statistical difference in the attrition rates between schools that use teaming and schools that do not use teaming, the study findings gave more evidence to the fact that with teaming comes a supportive atmosphere where teachers feel like they are part of a tight-knit family.

Also supporting this study's results, Carroll (2007) reported to the National Commission on Teaching and America's Future of the attrition problem and stated,

Until we recognize that we have a retention problem, we will continue to engage in a costly annual recruitment and hiring cycle, pouring more and more teachers into our nation's classrooms only to lose them at a faster and faster rate. This will continue to drain our public tax dollars, it will undermine teaching quality, and it will most certainly hinder our ability to close student achievement gaps. It does not have to be this way (p. 4).

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APPENDIX A: Initial Invitation Email

Hello,

My name is Angie Wilsford. I am a doctoral student at Southwest Baptist University and an eighth grade English teacher at Lebanon Middle School. I am collecting data to complete my dissertation to help identify the impact of middle level best practices on teacher attrition in Missouri middle schools.

If you are willing to participate, I ask that you kindly respond to this email by Friday, October 26, 2018. Once you have responded YES, I will send you a follow-up email that will contain the survey link and informed consent letter.

Feedback from you is greatly appreciated. The average time for completion of this survey is approximately 2-6 minutes and all responses are anonymous. Upon completion, this dissertation will be available for examination at <http://www.sbuniv.edu>. If you have any questions you may contact me at awilsford@lebanon.k12.mo.us. The informed consent letter is attached to this email. Again, if you are willing to participate please respond to this email with YES and I will forward you the link. As a thank you for your participation, at the end of the survey you may choose to enter your email address for a chance to win a \$250 Amazon gift card.

Thank you for your time and willingness to help me further the research of education and teacher attrition!

APPENDIX B: Informed Consent

Informed Consent Form

TITLE OF STUDY

The Impact of Teaming on Teacher Attrition in Missouri Middle Schools

PRINCIPAL INVESTIGATOR

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PURPOSE OF STUDY

You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.

The purpose of this study is to identify the relationship between teacher attrition and the use of teaming in middle schools. It is important for school leaders to understand the causes of teacher attrition and address the demands and guidelines set forth. Understanding how teaming impacts teacher perceptions of attrition could help stop the hemorrhage of trained educators. Teacher attrition has significant effects for the educational system and causes difficulties for students.

STUDY PROCEDURES

This is a mixed methods study using an anonymous survey tool to collect responses. All survey questions will be accessed through Question Pro, and the survey will be open for responses for a duration of two weeks. It is estimated that it will take respondents approximately 5 minutes to complete the survey. Willing participants will have the opportunity to enter into a drawing for a \$250 Amazon Gift Card as a thank you for participating. This entry will be the only time in which participants will need to enter any personal information, and it will not be tied to any data collected in the process.

RISKS

There are no known risks related to this research, and all information collected will remain anonymous. You may decline to answer any or all questions and you may terminate your involvement at any time if you choose.

BENEFITS

While there is no immediate or direct benefit to you for your participation in this study,

the hope is that the information obtained from this study might better help educational organizations identify areas in which teacher attrition might be reduced.

CONFIDENTIALITY

Your responses to the survey will be anonymous. Please do not include any identifying information when completing your survey.

COMPENSATION

Willing participants will have the opportunity to enter into a drawing for a \$250 Amazon Gift Cards as a thank you for participating. This entry will be the only time in which participants will need to enter any personal information, and it will not be tied to any data collected in the process.

CONTACT INFORMATION

This study was reviewed and approved by the SBU Research Review Board. If you have questions at any time about this study, you may contact the researcher whose contact information is provided on the first page or contact Dr. Tammy Condren at (417) 328-1737.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. This consent form will be included in all survey emails sent to teachers. By continuing to the survey itself, you are thereby consenting to participate in the research. You are free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher.
