Spring 4-2015

Merit Pay for Educators: An Investigation of Components Significantly Impacting Student Achievement

Lisa G. Carlon
Lindenwood University

Merit Pay for Educators: An Investigation of Components Significantly Impacting Student Achievement

by

Lisa G. Carlon

April 2015

A Dissertation submitted to the Education Faculty of Lindenwood University

In partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

Merit Pay for Educators: An Investigation Of Components

Significantly Impacting Student Achievement

by

Lisa Gail Carlon

This dissertation has been approved as partial fulfillment

of the requirements for the degree of

Doctor of Education

Lindenwood University, School of Education

Dr. Terry Reid, Dissertation Chair — April 28, 2015 (Date)

Dr. Sherry DeVore, Committee Member — April 25, 2015 (Date)

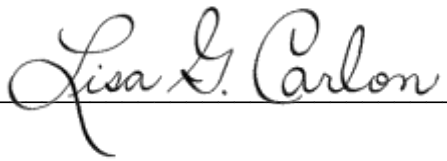
Dr. Patricia Conner, Committee Member — April 25, 2015 (Date)

Dr. Kathy Grover, Committee Member — April 28, 2015 (Date)

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: Lisa Gail Carlon

Signature:  Date: May 7, 2015

Acknowledgements

I would like to thank Dr. Sherry DeVore, Dr. Patricia Conner, and Dr. Kathy Grover for their patience, assistance, and support. Thank you to my doctoral colleagues, particularly Ms. Kay Marchand and Ms. Tina Brown, who tirelessly listened, proofed, critiqued, and supported me through this journey. I would like to especially thank my family and friends for their patience, prayers and encouragement. I would also like to thank my father, John Oscar Carlon, whose love and encouragement during his years on this earth continue to help me today. A most special thank you is given to my mother, Lola Jean Carlon, for her prayers, her continued belief in me, and her loving and faithful support. Lastly, I am grateful to the Lord Jesus Christ, through Whom all things are possible to them who believe.

Abstract

With teacher evaluations, school ratings, and ultimately school funding being linked more and more to student achievement data, U.S. public schools are searching for new and effective ways to boost academic testing scores. This study examined teachers' and administrators' experiences with and perceptions of merit pay, with the goal of identifying key program components positively impacting student success. With this information, solid and successful merit pay structures could be implemented in schools across the nation. Professional educators from two Midwest states who were involved in performance pay programs participated in the study through both a survey instrument and personal interviews. Surveys were crafted using the review of related literature, then distributed and collected via SurveyMonkey to educators in selected merit pay schools. Likert scale selections and open response inquiries were utilized to assess educator opinions and experiences. Personal interviews were scheduled and conducted within one Arkansas school district. This district employed an innovative merit pay program for educational stakeholders. Experiences, perceived strengths and weaknesses, and results of the merit pay structure were discussed during the interview sessions. Valuable perceptions regarding merit pay structure and implementation were gained. Three important factors of any successful school motivation program emerged. These three components included development of a purpose driven structure, fair measurement of student growth, and educator empowerment. Further research is recommended to determine varied and effective ways to structure programs to sustainably increase student achievement gains.

Table of Contents

List of Tables

List of Figures

Chapter One: Introduction of the Study

Traditionally, educational salaries in the United States are based on professional educators' level of education and years of experience (Sawchuk, 2010). This structure of pay in the U.S. began early in the 20th century, partly in response to problematic racial and gender discriminations present in public schools. (Dee, Keys, & Benjamin, 2005). First introduced in Colorado and Iowa, the salary structure balanced inequitable systems that paid females less than males, minorities less than Caucasians, and even elementary educators less than high school teachers (Delisio, 2014). Despite numerous modification attempts to implement innovative changes, the traditional pay system is still practiced in many public school districts.

This customary system guarantees regular salary compensations are unaffected by an individual educator's dedication to his or her career or the quality of his or her work (Sawchuk, 2010). This traditional structure leaves poor, average, and high quality teachers who operate at the same level of education and experience earning the same amount of money for their significantly varied contributions to student achievement (Sawchuk, 2010). Educators' levels of motivation can diminish over time as no recognitions, advancements, or financial bonuses are provided for exceptional accomplishment or extra efforts (Odden & Kelley, 2002). Numerous changes continue to be proposed to this system (Sawchuk, 2010). Popular recommendations include group incentive pay, individual incentive pay, pay for performance, merit pay, and success pay package implementations (Delisio, 2014).

Weldon (2011) defined merit pay as compensating teachers based on accomplishments determined by established performance standards, added

responsibilities other than levels of education and years of teaching experience. With merit pay, also called performance pay, teachers who complete added responsibilities or achieve greater classroom successes earn monetary bonus compensation (Gratz, 2009).

In some programs, student achievement scores determine educators' percentage of performance pay, while in others specific professional responsibilities focused on increased student success are available for teachers to complete to earn bonus compensations (Weldon, 2011).

As the structures of the American education systems have changed and competitions between professionals have increased, many school administrators and political leaders have become concerned these traditional methods of compensation would not attract, motivate, or retain high-quality teachers to the profession (Dee et al., 2005). These apprehensions, along with a political push from the Reagan administration to develop and implement pay for performance motivational structures in U.S. public schools, caused educational leaders in 29 states to initiate various merit pay programs for teachers during the early to middle 1980s (Dee et al., 2005). The political push for monetary bonuses and compensations tied to educator performance remains strong as current educational and political leaders continue to search for ways to improve student academic achievement in U.S. public schools (Burns & Gardner, 2010).

In the late 1990s, the Maryknoll School in Honolulu, Hawaii began investigating merit pay as a more equitable means of compensating teachers (Morey, 2008). Proponents of performance pay programs purport teachers' efforts increase when opportunities for additional compensations are offered (Milanowski, 2002). In turn, merit pay supporters believe student achievement automatically increases. Supporters also tout

school districts participating in some type of pay for performance structure have a greater advantage when recruiting and retaining quality teachers (Glass, 2011).

One of the longest established performance pay programs in the country was Missouri's Career Ladder program (Booker & Glazerman, 2009). Originally established in 1985, the Missouri Career Ladder performance pay program offered bonus compensations to public school teachers and other professional educators who performed added responsibilities related to student academic growth (Booker & Glazerman, 2009). The Missouri pay for performance structure was unique, employing a balance of added responsibilities for educators, tenure, and observed teacher performance as critical components (Booker & Glazerman, 2009).

Bonus compensations were tiered and were directly tied only to the added responsibilities for educators such as after school tutoring, extracurricular clubs, and professional development activities for educators (Booker & Glazerman, 2009). Unlike the majority of other pay for performance programs around the country, the Career Ladder program did not consider student academic achievement as a component utilized for bonus compensation reward (Booker & Glazerman, 2009).

The established primary goals of the Career Ladder pay for performance structure included recognition of high quality teachers, increased professional growth, improved student achievement, and career advancement for educators (Booker & Glazerman, 2009). To be eligible for initial participation in the program, an educator was required to have five years of teaching experience with acceptable evaluations from administrators (Booker & Glazerman, 2009). Educators in this stage could receive up to $1,500 per year in bonus compensation (Glazerman & Silman, 2009). Advancement to Stage Two

occurred automatically after two years of acceptable participation in Stage One, and Stage Three was achieved after three more years of acceptable evaluations and continued program participation (Booker & Glazerman, 2009). At these levels, participants could earn up to $3,000 in Stage Two and $5,000 in Stage Three annually (Glazerman & Silman, 2009). In 2010, Missouri Governor Jay Nixon proposed deep cuts to education funding, placing the future of the Career Ladder program in jeopardy (Livengood, 2010). Questions and controversies over future funding caused many participating districts to abandon the program, but Career Ladder pay for performance programs are still utilized in a few Missouri public schools that choose to fund independently (Livengood, 2010).

Opponents of pay for performance structures argue monetary bonuses have no significant and sustainable positive effect on student learning and growth, instead causing teachers to merely focus the majority of their efforts on improved achievement test scores or specific programs rather than a rich, broad curriculum filled with application activities (Clabaugh, 2009). In addition, past attempts have reported challenges in the effective identification of successful teachers and the determination of methods of evaluation completed fairly and without bias (Podgursky & Springer, 2007). Monetary rewards must be significant (10% to 20% of annual salary) in order for true positive effects to transpire (Ritter & Jensen, 2010).

Opponents further argue offering monetary rewards to teachers who achieve higher than their peers causes competition and ends desired collaboration, thus weakening educators' overall positive impact on students (Clabaugh, 2009). Collaboration has traditionally been a valued foundation of American educators' mentoring and development (Pechthalt, 2007).

Finally, challengers assert the activities which qualify some teachers for merit pay are typically part of a normal workday, and therefore, have no added benefit for students (Glazerman & Silman, 2009). Some performance pay qualifiers even mirror traditional single-salary system requirements. Denver, Colorado's performance pay structure, utilized as one of the national models for merit pay, have awarded higher educator bonuses for completion of advanced degrees than for classroom performance and student measured outcomes much like the traditional single salary schedule (Buck & Greene, 2011). The Maryknoll School faced substantial challenges in implementation of the merit pay program as administrators struggled to nurture effective team collaboration and build good communication among staff while working to establish solid and reliable methods for assessing teacher performance levels (Morey, 2008).

President Obama and his administration have emphasized a need for reformations in public school education, as did his predecessors (Burns & Gardner, 2010). U.S. political leaders believe that powerful educational reforms and greater academic achievement is needed for America to compete on the world stage (Duncan, 2011). As a result, considerable funding is being dedicated to the study, development, and subsequent implementation of teacher merit pay programs (Burns & Gardner, 2010). Merit pay, or performance pay, is simply salary bonuses or compensations based on the educator's performance (Morey, 2008). It is a stipend awarded to educators for completion of a particular task or set of tasks defined by a school district.

Merit pay typically does not alter the salary schedule, rather supplementing it with possible bonuses (Morey, 2008). Teachers who enjoy greater student academic success

in the classroom or teachers who complete extra professional responsibilities can earn more than teachers without such noted achievements (Morey, 2008).

The success or failure of merit pay programs is widely debated (Goldhaber, DeArmond, Player, & Hyung-Jai Choi, 2008). Some programs show noticeable success, while some show little or no significant and sustainable results (Morey, 2008). Other programs show impressive initial gains, but prove unsustainable over time (Podgursky & Springer, 2007). Identifying common components in existing effective merit pay programs can provide a framework for structuring or reorganizing merit pay systems which lead to greater student achievement (Morey, 2008).

Conceptual Underpinnings

The conceptual framework of this study was derived from an examination of merit pay programs to determine common components producing successful and sustainable growth in student achievement. Traditionally, public school teachers have been compensated using single salary schedules consistent for all educators within a district (Podgursky & Springer, 2007). Salaries are increased based on years of experience or number of college hours achieved (Harrison & Cohen-Vogel, 2012). However, the educational background of teachers, including various degrees, completed coursework, and years of teaching experience, can have little bearing on student achievement (Solmon, 2005).

Early concepts of merit pay programs were founded simply on the idea financial incentives would increase teacher effort and therefore automatically improve student performance (Bettinger, 2012). However, educators are typically motivated most significantly by intrinsic factors such as helping others achieve success, being a role

model to others, and helping to bring about positive change (Callier, 2010). Past attempts at performance pay have revealed that extrinsic motivations such as monetary bonuses can actually have a negative effect when used with weak and improper structures (Pink, 2009). In addition, only a small number of sustainable studies have been conducted to evaluate the effectiveness of merit pay as a tool for increasing student success (Goodman & Turner, 2011).

One of the largest studies conducted to date is the Project on Incentives in Teaching (POINT), conducted by researchers at Vanderbilt University in Nashville, Tennessee (Connell, 2010). This study utilized 296 middle-school math teachers employed with the Nashville metropolitan public school system from 2005 to 2010 (Moran, 2010). The participating educators were randomly placed in control or treatment groups with the possibility of yearly bonuses of $5,000, $10,000 or $15,000 to those teachers whose student scores showed significant gains on the state achievement test, known as the Tennessee Comprehensive Assessment Program (Connell, 2010).

Due to teacher attrition and other extenuating circumstances, less than half of the participating educators remained in the study for the full time (Moran, 2010). During the course of the study, one-third of eligible teachers received bonuses at least once, with only 18 of the original 296 teachers earning bonuses each year (Connell, 2010). Students who were taught by teachers earning the merit pay bonuses did show gains in academic test scores. These gains did not continue when students tested again the following year and were therefore deemed unsustainable (Moran, 2010). As a result, researchers concluded merit pay bonuses did not achieve lasting measurable gains in student achievement (Connell, 2010).

Dr. Leslie Ann Feinglas (2009) conducted a study of Texas public school educators and the Texas Educators Excellence Grant (TEEG) to determine if pay for performance programs have a measurable, significant, and sustainable impact on student achievement, specifically standardized test scores (Feinglas, 2009). The TEEG, criticized by teachers' unions from its onset due to the direct link between student standardized testing and teacher evaluation, was introduced to Texas educators in 2006 to reward teachers of students performing at a specified higher level on state standardized tests (Springer, Lewis, Podgursky, Ehler, Gronberg, & Hamilton, 2009). The 2009 study saw no significant gains in student achievement when merit pay was offered through the TEEG. The researcher concluded the lack of availability of current research regarding incentive programs and the absence of effective preparation was the cause (Feinglas, 2009).

Podgursky and Springer (2007) studied various merit pay programs for educators around the world to examine the propensity of these programs to positively affect student achievement. Notable successes in other programs occurred when teachers were involved in all steps of the design process (Jupp, 2005). Information has not been largely examined to determine what denotes an effective performance pay structure, but successes have been documented that suggest more research is needed to outline necessary criteria for successful implementation (Podgursky & Springer, 2007).

Statement of the Problem

The debates for and against pay for performance compensations are substantial and can be discussed at length. The significant question remaining, however, centers on what impact, if any, these programs have on students' academic progress. Merit pay is

now a significant component in future federal funding for schools, leaving states and individual school districts scrambling to develop frameworks needed to build successful performance pay programs (Podgurksy & Springer, 2007).

The need for successful performance pay program designs is being explored and tested on both local and state levels across the United States as an incentive to improve student achievement and growth (Gratz, 2009a). Florida educators in the Miami-Dade County school district implemented a new performance pay incentive program in the 2011 school year, with teachers offered merit incentives from $4,000 to $25,000 for measurable increases in student scores (Butrymowicz & Isensee, 2009). Miami-Dade, the fourth-largest school district in the United States, and the first in the state of Florida to attempt a merit pay program, hoped to show gains other states have been unable to achieve (Butrymowicz & Isensee, 2009). Under legislation first initiated by former governor Jeb Bush, teachers' evaluations and salaries would be directly linked to student test scores (Thomas, 2010). Florida Attorney General Charlie Crist, opposed the 2010 proposed plan legislation, stating:

> SB 6 places teachers in jeopardy of losing their jobs and their teaching certificates without a clear understanding of how gains will measured, and without taking into account circumstances beyond the teacher's control. Teachers have an incredible impact on the lives of their students, but they are not the only influence. (Hafenbrack, 2010, p. 4A)

Rick Scott, elected Florida's governor in 2010, championed the idea of performance pay for educators, signing the Student Success Act in March of 2011 (Sanders, 2011). The Student Success Act eliminates tenure for teachers and directly

links educator pay scales to student performance (Sanders, 2011). In April of 2014, a federal judge ruled that portions of the new law were unconstitutional, focusing on teacher evaluations unfairly tied to the achievement scores of students they did not teach in all subjects and objectives (Postal, 2014).

Purpose of the Study

The Obama administration's Race to the Top offers incentive grants to states linking individual teacher performance ratings directly to student test scores (By What Measure? 2012). Differential salary compensations for educators could increase the quality of teacher performance, reduce teacher shortages in certain subject areas and low-income schools, reduce inequitable dispersal of effective teachers, and ultimately increase student academic growth and achievement. Merit pay program designers must be cautious, as extrinsic motivators such as monetary bonuses can induce a substantially negative effect on educators when structured improperly (Pink, 2009); therefore the purpose of this study was to evaluate specific merit pay programs to identify key elements that produce documented and sustainable growth in student achievement.

Research Questions

Key components defining how merit pay awards are received were examined. Schools in two Midwest states were utilized in the study. Each of these schools has participated in a merit pay program. A special focus was placed on a central Arkansas school district. This district has utilized some ambitious and unique approaches to the merit pay concept. The following research questions were examined in order to determine common components of merit pay programs which have shown documented and sustainable increases in student achievement:

1. What key principles and components guide merit pay programs?
2. What is the connection between merit pay and academic achievement?
3. What are the perceived effects of merit pay?

Definition of Terms

Considering that many terms and words may have multiple uses or meanings, the following definitions are included to add consistency and clarity.

Career Ladder. Missouri state-funded performance pay program for public school educators. Missouri's Career Ladder used specific indicators such as tenure, observed teacher performance, and specific added professional responsibilities as standards for yearly monetary bonuses for public school classroom teachers (Booker & Glazerman, 2011).

Extrinsic motivation. Motivation originating outside an individual through rewards, bonuses, or prizes. Financial rewards are primary extrinsic motivators (Bainbridge, 2010).

Intrinsic motivation. Motivation originating inside an individual rather than outside, or motivation achieved through accomplishing a task. Intrinsic motivation provides internal rewards, directly linking to activities, choices, and devices an individual values and enjoys (Bainbridge, 2010).

Merit pay. Salary or bonus compensations based on an individual employee's or group of employees' performance over time, assessed according to predetermined standards (Milanowski, 2002).

No Child Left Behind. Federal act, also referred to as NCLB, established by the George W. Bush Administration in which public schools are to report any levels of

achievement showing a steady increase, with every child expected to achieve mastery of state grade level expectations by the year 2014. No Child Left Behind mandated yearly standardized testing for all 50 U.S. states (Devarics, 2010).

Performance pay. Salary or bonus compensations based on an individual employee's or group of employees' performance over time, assessed according to predetermined standards (Milanowski, 2002).

Race to the Top. Federal act extending and altering No Child Left Behind based on four objectives. These objectives include equitable teacher distribution, improved data collection and usage, effective enhancement of standards and assessment, and support for struggling schools (Whitehurst, 2010).

Single salary schedule. Widely used structure of salary advancement for public school teachers in the United States. Also called a step and lane schedule, a single salary schedule is organized with rows and columns. Teachers receive raises as they advance down the schedule columns due to increased years of experience and may also advance across the rows if they choose to complete additional educational hours or degrees (Podgursky & Springer, 2007).

Standardized test. Assessment measurement tool administered to public school students and utilized to document and compare students' academic achievement growth over time. Student standardized test results have become an increasing component of public school teacher evaluations (Milanowski, 2002).

Tutoring. Individual or small group assistance for students. Often conducted before school, after school, or during designated breaks, tutoring provides a time for students to receive extra help from teachers (Milanowski, 2002).

Value-added measurements. Measures individual students' growth from one year to the next, attempting to more accurately assess a teacher's influence on learning for evaluative purposes. The reliability of value-added measurements is dependent on definition and calculations, which are difficult. For example, measuring the value of teacher contribution to individual student's learning necessitates identifying not only what each student has learned in a particular year but also the rate at which each student learns (David, 2010).

Value-added models. Measures and assesses student achievement by utilizing standardized academic achievement scores of students from one school year. Value-added models determine student growth through comparison of test score results (David, 2010).

Limitations

Sample size. Research was conducted in two adjoining U.S. states. Utilization of a small sample size provides outcomes suggestive of a larger population. These outcomes cannot be generalized to the broad populace without further research. Small sample outcomes may exaggerate the significance of the collected data (Hackshaw, 2015).

Research instruments. The research was conducted during one academic semester and was limited to individuals voluntarily choosing to participate. Studies conducted during a certain period deliver limited snapshots, dependent on all extraneous conditions occurring during that time (Simon, 2011). Teacher morale, political climate, financial stability, administrative support, and numerous other factors may have affected teachers' perceptions of merit pay program benefits and achievements.

Factors beyond the scope of study. Participants in the study may have only had experience with one performance pay program for educators. Limited exposure could limit the depth of respondents' attitudes and opinions regarding merit pay strengths and successes. According to Simon (2011), qualitative research is bound but not negated by participants' subjective reality, with rich meaning embedded in each individual's limited experiences.

Significance of the Study

This study is significant to all school districts searching for ways to improve student achievement. Of course, improving results for students is ultimately the goal of all educators (Bettinger, 2012). However, NCLB and Race to the Top have raised the stakes for all schools (Burns & Gardener, 2010). Commonalities of success in performance pay programs can be identified and utilized by districts to assist in achievement of adequate yearly progress goals (Devarics, 2010). These field-tested commonalities are of critical importance for successful program implementation (Milanowski, 2002). Comparing performance pay programs for educators in school districts around the United States, Ron Matus (2011), of the Tampa Bay Times, indicated whether merit pay systems are structured at the state or local level, the specific components designated in the frameworks are greatly significant to program success.

Summary

The validation or condemnation of established merit pay programs for educators can be measured by the success or failure of each program's objectives over time. Initial gains do not guarantee program success. Sustainability of the program over a significant amount of time determines the strength of the developed structure. Numerous

performance pay programs for public school educators have been developed and tested in American public schools using a variety of strategies and rewards.

Current political trends now strongly encourage state education departments to develop and utilize pay for performance compensations tied to student achievement as a primary motivator for professional educators (Duncan, 2011). This study examined specific merit pay programs to identify key components that can be utilized to positively impact student growth and success. In Chapter Two, a review of existing literature related to various merit pay programs was examined. The goals of various programs, along with the outcomes of current and past programs were outlined.

The primary motivations of most teachers were also discussed, examining extrinsic and intrinsic motivators as conduits for greater impact and change. The problematic process of fairly assessing professional educators was discussed, as well as the possible negative effects of the process. Sustainability of past performance pay programs was addressed, along with the significance of assured durability on teachers' opinions and trust. Complications of past and present programs are also outlined, providing future plan developers to avoid duplication of recognized complications. Lastly, the current political push by federal and state governments for successful merit pay programs in the public schools was presented.

Chapter Two: Review of Literature

Administrators and educators are currently scrambling to find successful methods to improve school performance in response to No Child Left Behind and Race to the Top. In 2010, 111 Florida principals were surveyed to determine whether or not they believed the 100% proficiency goal of NCLB was attainable in their schools by the 2014 deadline established in the original legislation (McCullers & Bozeman, 2010). Only 23 principals responded positively, believing this goal was attainable (McCullers & Bozeman, 2010).

Forty-four states, the District of Columbia, and the U.S. territories of Guam, American Samoa, the U.S. Virgin Islands, and the Northern Mariana Islands have adopted Common Core State Standards (Moxley & Lin, 2014). Significant federal funding is tied to successful Common Core implementation (Moxley & Lin, 2014). Effective motivators for teachers, such as performance pay structures and bonuses, can assist public school districts scrambling to reorganize practices and meet new challenges and demands.

Information on the strengths, weaknesses, benefits, and pitfalls of merit pay programs for educators is varied and contradictory (Harrison & Cohen-Vogel, 2012). Educational union organizations and others argue teacher collaboration, a critically valuable component of the American education system, will be replaced by competition (Pechthalt, 2007). To combat this challenge, innovative performance pay programs have included integral requirements within program structure to promote healthy collaboration (Solmon & Podgursky, 2001). In certain educational communities, effective pay for performance programs must include safeguards assuring balanced effort in teamwork situations (Springer, Ballou, Hamilton, Vi-Nhuan, Lockwood & McCaffrey, 2010).

When monetary compensations are awarded for tasks professional educators have completed in a group situation, some educators may put in less effort than others, yet all members are compensated equally (Solmon & Podgursky, 2001).

Defining best practices for evaluation, comparison, and rating effective educators presents another challenge (Weldon, 2011). Historically, administrators' opinions have been a key component of teacher evaluations, rather than valid and reliable forms of comparison measurement (Solmon & Podgursky, 2001). Teachers should explicitly understand the scoring guides, target outcomes and evaluation procedures utilized by administration for evaluations if positive effects and growth are desired (Darling-Hammond, 2010).

Historical Background

In 1710, selected schools in England attempted implementation of a pay for performance program for teachers (Wisconsin Education Association Council, 2011). Educator compensations were based on academic student scores (Burns & Gardner, 2010). The programs were abandoned when evidence suggested participating educators focused more on possible extrinsic rewards and neglected implementation of quality education for students (Solmon & Podgursky, 2001). Other schools in England began experimenting with merit pay incentives to motivate educators during the late 1700s (Wilms & Chapleau, 1999). In 1862, educational leaders adopted a Revised Education Code which based teacher salaries directly on student achievements in reading, writing, and arithmetic (Wilms & Chapleau, 1999). This system was kept in place for over 30 years, then eliminated due to widespread controversial accusations of teaching specifically to the test, narrowing the broad curriculums to only include tested objectives,

and even accounts of teachers helping students to memorize facts and passages without understanding in order to score well on annual assessments (Wisconsin Education Association Council, 2011). The summation of long-term overall effects and common outcomes of England's Education Code's merit pay system included a drastic drop in individual teacher creativity, since teachers were told exactly what they were to teach, outlined by the Revised Education Code (Wilms & Chapleau, 1999).

A stronger negative effect of the Education Code was widespread cheating and dishonesty (Wisconsin Education Association Council, 2011). Documented occurrences of cheating included falsifying records, teachers signaling students of right or wrong answers while testing, and an overall reduction in the quality of education for students due to diminished curriculum and lessened instructional applications (Wilms & Chapleau, 1999). Nearly two decades after the Education Code's failure, Edmond Holmes, one of England's top educational leaders, studied the history of the flawed program extensively, describing standardized curriculums and achievement testing for teacher performance pay as the process of "laying thin films of information on the surface of the child's mind, and then, after a brief interval, skimming these off in order to satisfy that they have been duly laid" (Gratz, 2009, p. 5).

Canada also adopted a system in the 1870s directly linking educator pay to student performance (Wisconsin Education Association Council, 2011). The initial results were positive and enthusiasm was high as educators and students worked hard to meet the demands required (Wilms & Chapleau, 1999). Academic scores initially indicated significant growth in student achievement when merit pay bonuses and salary compensation programs were first implemented (Wilms & Chapleau, 1999). The system

faced strong controversy by the late 1880s when public oppositions including accusations of narrowing the curriculum of studies in order to teach to the test, various forms of widespread cheating claims, and unfair comparisons of student success were examined (Wisconsin Education Association Council, 2011). Public protests and active resistance to the Canadian pay for performance structures effectively dissolved the program by the end of the 1880s (Wilms & Chapleau, 1999).

The first known merit pay program for teachers in the United States was developed in 1908 in Newton, Massachusetts, but proved unsustainable and gained minimal attention (Wisconsin Education Association Council, 2011). Merit pay for teachers in the United States was reintroduced by President Richard M. Nixon in 1969 (Kershaw, 2000). Public school accountability was of significant importance to the Nixon Administration, and the implementation of the new idea of standardized student testing and systematic merit pay structures were given high priority (Wilms & Chapleau, 1999). Civil inequalities were of prevalent concern in the country when President Nixon assumed office, and the President's administration was very concerned about inequality in education among different racial and socioeconomic groups in the U.S. (Wilms & Chapleau, 1999). According to Wilms and Chapleau (1999):

> The outcome of schooling--what children learn--is profoundly different for different groups of children. School administrators and school teachers alike are responsible for their performance, and it is in their interest as well as in the interests of their pupils that they be held accountable. ... [T]he avoidance of accountability is the single most serious threat to a continued, and even more pluralistic educational system. (p. 34)

As a result of identified inequalities in public education, President Nixon's administration searched for effective solutions to the problem (Kershaw, 2000).

President Nixon's innovative Performance Contracting initiative challenged private companies outside the field of education to find new and innovative ways to improve student achievement in public education (Wisconsin Education Association Council, 2011). The first national experiment in educational pay for performance systems was conducted for this purpose in 1969 within the Texarkana, Arkansas school district (Kershaw, 2000). Overseen by the United States Department of Health, Education, and Welfare in Washington, DC, the primary objective of this study was to significantly increase students' academic achievement in reading and math for the 300 upper and middle students of Texarkana public schools (Wilms & Chapleau, 1999). At the time of the experiment's implementation, Arkansas schools were one of the lowest ranked in the nation, with a major achievement gap existing between students of different races (Kershaw, 2000). During this experimental pilot program, Texarkana school district leaders agreed to give program funds back to the federal government for each student who did not meet designated levels of scholarly achievement (Kershaw, 2000).

A perceived advantage of this structure over England's Code of Education was the pioneering introduction of standardized testing, contracted and designed by outside sources to provide a fair and consistent measurement for student growth comparisons (Wilms & Chapleau, 1999). Private companies conducted extensive studies and developed the innovative standards of measurement, the testing instruments and administration practices to be utilized, and the resulting comparative evaluative criteria for teachers and school employees to earn merit pay compensations (Kershaw, 2000).

Success incentives were available to all stakeholders including teachers, administrators, and students (Wilms & Chapleau, 1999). Teachers and administrators could earn monetary compensations, while students could earn prizes including transistor radios, green (trading) stamps and rock music albums for successful completion of the new standardized testing instrument (Kershaw, 2000).

Initial results were astounding, as enthusiasm and efforts increased when extrinsic rewards were offered (Wilms & Chapleau, 1999). Students on average showed documented gains of more than two grade levels in both reading and math in the first year of program implementation (Wilms & Chapleau, 1999). Program developers and supporters quickly proclaimed the design a noteworthy success and rapidly encouraged expansion of the pioneering concept to schools in other cities and states in order to test the validity of the impressive results on a broader scale (Kershaw, 2000). Over 150 schools partnered with private companies to set district standards, develop standardized instruments for assessment, and link students' achievement and growth to monetary and other compensations for stakeholders (Wisconsin Education Association Council, 2011). By the early 1970s, President Nixon's experimental and groundbreaking program extended throughout both Texas and Arkansas (Wisconsin Education Association Council, 2011).

Accusations of various forms of cheating including teaching to the test, encouraging students to memorize test answers without understanding the concepts, and teachers signaling students when answer choices needed correction soon were publicized and scandal erupted (Wilms & Chapleau, 1999). Negative publicity, inaccurate measurement of student growth, and other controversies caused the programs to be

abandoned and the performance contracting experiments were branded a failure (Gratz, 2009).

In the early 1980s, pay for performance programs for educators again received national attention when President Ronald Reagan wrote to Willard H. McGuire, then president of the National Education Association, outlining the President's concerns over traditional teacher single salary schedules (Reagan Presidential Library, 2010). President Reagan prioritized his concerns after The National Commission on Excellence in Education's report, *A Nation at Risk*, was researched and released (Sawchuk, 2010). *A Nation at Risk* specified the United States public education system faced serious future concerns such as weak curriculums, continuing decreases in student achievement, inadequate teacher preparation college programs, and a national increase in mediocrity of attitude towards education and its significance (Sawchuk, 2010). President Reagan proposed a radical reduction in the federal government's involvement in local public schools, as well as a structured system of merit pay to reward educators of excellence as primary solutions to the problems outlined in the Commission's report (Sawchuk, 2010).

In 1999, the school board and teachers associations of the Denver, Colorado, schools supported a new pilot program involving merit pay for educators (Gratz, 2009). The two-year pilot program directly linked teachers' salaries to student performance (Gill, Bruch, & Booker, 2013). At the end of the pilot program, evaluators identified problems in the structure such as inadequate measurement of student performance, inability to connect student learning specifically to individual teacher contribution, and exclusion of contributors not employed in a regular classroom setting (Gratz, 2009).

Goals of Merit Pay

Politicians have long believed shifting to performance pay from the traditional single salary schedule in education would cause a significant rise in teacher performance and therefore produce measurable gains in student achievement for many years (Jupp, 2005). However, thousands of U.S. school districts continue to operate using a standard single salary schedule, with raises in pay based on years of experience and level of education (Harrison & Cohen-Vogel, 2012). Using the standard single salary schedule, pay increases benefit all employees causing effective teachers and inadequate teachers to receive the same compensation (Solmon, 2005). Merit pay programs provide a means to correct this situation (Podgurksy & Springer, 2007).

Tennessee wholeheartedly embraced the concept of linking teachers' salaries to performance (Callier, 2010). Adopted by the state Board of Education for the 2014-2015 school year, the new plan mandated that all schools structure a differentiated merit-based pay schedule (Spears, 2013). Traditional step raises will be given during an educator's sixth and eleventh year, but all other raises must be based on performance, with individual districts left to determine appropriate methods and benchmarks for measurement (Sawchuk, 2013).

The methods for determining performance pay compensations can be extremely varied, with some districts choosing to rely solely on student standardized testing scores, others utilizing arbitrary observations by administrators or identification and evaluation of other factors significant to student growth, or the "Career Ladder" approach of providing teachers with certain extra duties or responsibilities to satisfy criteria, or even based on arbitrary evaluations by administration (Spears, 2013).

Other states, like Minnesota, Ohio, Colorado, Mississippi, Texas, Pennsylvania, and many more are also currently implementing pay schedules for teachers directly linked to performance (Milkovich, Newman, & Gerhart, 2014). Structuring performance programs effectively has proven to be difficult due to issues including fairness, motivation, and equitable evaluation of results (Podgursky & Springer, 2007). Identification of fair and consistent systems of evaluation and measurement provides a great challenge in well-constructed systems of performance pay for educators' situations (Springer et. al. 2010).

According to Callier (2010), certain factors must be in place for merit pay systems to be effective. Some of the most significant merit pay models are found in business and industry (Milkovich et al., 2014). Effective and reliable results are obtained when production outputs are measurable and connected to components that can be linked to a single employee, rather than a compilation of efforts from many (Park & Sturman, 2012).

In educational systems, the desired product is improved student growth and achievement, often measured by improved standardized test scores (Callier, 2010). Many districts believe merit pay programs must be clearly outlined and evaluated through actual student achievement data rather than the professional steps merely thought to influence the student growth outcomes (Goodman & Turner, 2013). The programs are based on the premise that if the structure is not founded solely on student standardized testing data, then steps could be identified, completed, and rewarded that have little or no effect on the desired outcome (Goodman & Turner, 2013).

Other districts base performance pay earnings on things teachers can directly control such as good professional practices (Milkovich et al., 2014). In Cincinnati, Ohio,

teachers are evaluated six times during each school year, and performance pay is determined from these six evaluations (Milkovich et al., 2014). As part of uniform state teacher evaluations, standardized student test scores are examined to verify how well students are showing growth in each teacher's class (Kelley, 2013). This standardized test information, however, is not a contributing factor to the teachers' performance pay salary increases (Milkovich et al., 2014). Based solely on the performance evaluations, which include standards such as choosing proper instructional materials for the classroom, differentiation steps implemented to accommodate specific student needs, and other good professional practices, teachers are rated as *Ineffective, Developing, Proficient,* or *Advanced,* and pay increases are tied to these classifications (Kelley, 2013). Developers of this system have modeled the professional rating system on standards defined for members of the medical field, where expert standards and best practices cannot assure successful results (Milkovich et al., 2014).

Teacher Motivations

Callier (2010) believed teachers are typically motivated primarily by intrinsic factors rather than extrinsic rewards. Performance pay plans, when poorly structured, propose lack of teacher motivation as the primary factor in student failure and believe financial bonuses provide the solution (Gratz, 2009b). While professional educators are often encouraged by monetary compensations, this motivation is typically secondary to more fundamental elements such as helping others succeed, touching a life, or simply making a positive difference (Hemmingsen, 2014). Merit pay bonuses, if inadequately structured, highlight the supposition that inadequate student achievement is directly caused by professional educators not utilizing best practices simply because they are not

motivated to do so (Gratz, 2009b). Performance pay programs are also based on the supposition educators know how to resolve student challenges and increase growth in learning but simply choose not to do so due to low financial rewards (Gratz, 2009b). Lastly, poorly designed performance pay programs strengthen implications of educators' motivations based on financial rewards more than student success resulting in a negative impact to all stakeholders (Gratz, 2009a).

Effective merit pay programs must involve staff members who are genuinely and sustainably motivated by money (Callier, 2010). Ritter and Jensen (2010) believed teachers will only take merit pay programs seriously when substantial awards involving 10% to 20% of base salaries are offered. Extrinsic rewards as a primary motivator can have a negative effect if not structured carefully, reducing desired outcomes rather than increasing them (Pink, 2009). Financial rewards, if not based on sound structures, may realign teachers' focus away from established intrinsic rewards as new challenges are presented, therefore reducing teacher effectiveness and lowering desired outcome successes (Ritter & Jensen, 2010). Therefore, money alone does not often produce successful motivation in school settings (Callier, 2010). Survey results have also suggested public school teachers are more motivated by working conditions than by financial rewards (Ladd, 2012).

Sustainability

Program sustainability must also be examined, as merit pay bonuses guaranteed for only one year will not motivate educators to alter their approach to teaching in any long-term, maintainable way (Ritter & Jensen, 2010). Current developmental performance pay structures are recognizing the need to fund the programs long-term (Rosales, 2014). Not

funding the program for a lengthy period of time is one of the potential problems in merit pay and may negatively affect long-term student achievement (Podgursky & Springer, 2007).

Administrators and teachers in the Denver, Colorado, school system utilized a financial analyst to develop a 50-year model to assure district educators could expect consistent compensation opportunities throughout their careers (Jupp, 2005). Developers of the Denver program realized there could be economic and political obstacles in maintaining a merit pay plan long term (NFL Public Forum Handbook, 2009). This fact motivated Denver educators to utilize professional assistance in establishing a long-term model of compensation (Jupp, 2005).

Historically, there have been few sustainable performance pay programs active in public education. A study conducted in 2011 by the University of Colorado's School of Education reflected an increase in student achievement after implementation of a tested merit pay system, but could not substantiate nor isolate the precise cause (Elliot & Butrymowicz, 2013). Texas schools participating in experimental merit pay programs had initial gains in student achievement during initial implementation (NFL Public Forum Handbook, 2009). Financial setbacks in the state economy forced the end of the program before definite and sustainable growth data could be documented (Stutz, 2013). Conclusive evidence does not exist verifying merit pay reformations would improve the teaching profession and student achievement over time (Toch, 2009).

Missouri's Career Ladder pay for performance structure was one of the longest established pay for performance programs in the country (Booker & Glazerman, 2009). Started in 1985, the program encountered significant challenges due to decreases in

funding by the state government (Livengood, 2010). The Missouri Career Ladder program was distinctive; ignoring student standardized testing as an indicator for monetary bonus distribution (Booker & Glazerman, 2009). Questions and controversies over future funding caused many participating districts to abandon the program, but Career Ladder pay for performance programs are still utilized in a few Missouri public schools (Livengood, 2010).

Fair Assessments

Developing solid criteria to define teacher performance fairly and consistently is problematic and difficult (Gratz, 2009a). There are many ways to approach measurement of teacher effectiveness, and schools should examine and structure methods carefully before developing and implementing a merit pay system of any kind (Callier, 2010). Without careful preparation and planning, chaos can ensue as teachers become disillusioned, unmotivated, and even angry (Ritter & Jensen, 2010).

Traditionally, educators in the United States have been measured and classified based on levels of education and years of experience (Deubel, 2011). With these payroll classification benchmarks, teacher evaluation ratings of satisfactory are the standard and have no effect on educators' salaries or bonus compensations (Deubel, 2011). Policymakers seeking to raise the quality of education for students in American schools would historically raise the number of requirements necessary to obtain teacher certification in an effort to improve the quality of teachers entering the profession (West, 2013). Assessments required to obtain teacher certification are designed to measure educators' knowledge of subject matter and teaching practices before they enter the profession, making these tools inadequate for reliable teacher effectiveness accountability

(Darling-Hammond, 2010). After entering the profession, teachers receive minimal evaluations, leaving ineffective teachers at work and offering no extrinsic incentives to educators performing at high levels of excellence (Staiger, Gordon, & Kane, 2006).

Many politicians and educational leaders now believe that new assessments of teacher effectiveness are needed (Gratz, 2009a). The Kentucky Department of Education (2013) designates the necessary and reliable components of highly effective teaching as creation of an effective learning climate, clearly defined classroom assessments and reflections, appropriate instructional rigor and effective student engagement, instructional relevance of classroom activities to students, and teachers' understanding and application of subject contents. Public schools leaders in Memphis, Tennessee have demonstrated the belief that teacher evaluations should be multifaceted, with teacher evaluations based on principal observations (40%), student test scores (35%), other measures of student achievement (15%), teacher content knowledge, (5%), and innovatively even student perceptions of their teachers (5%) comprising all components of measurement data (Duffy, 2011).

Other districts across the nation have cited student engagement, community building, educational rigor, high expectations for students, effective skill development, and relevancy to students as primary indicators of effective teaching (Aguilar, 2011). Still others maintain the art of teaching is so intricate, complex, and multifaceted that effective and reliable measurement is not possible at all (Darling-Hammond, 2010).

In contrast, a study by Harvard University's Graduate School of Education (2012) indicated data gained from value-added measurements such as students' test scores provide a reliable and strong indicator of teacher performance. A three-year study funded

by the Bill and Melinda Gates Foundation called the Measures of Effective Teaching (MET) project, designated three recommended measurements for teacher evaluation: classroom observations, student surveys, and student achievement gains on standardized testing. Further research has suggested value-added measurements, observational assessments, and other determinants should be utilized when evaluating educator effectiveness (West, 2013).

Evaluating teachers using students' standardized achievement test scores has raised concerns across the country from various educational groups (Darling-Hammonds, 2010). Linking teacher evaluations and subsequently teacher bonuses and salaries to student standardized test scores has many oppositions including the ineffectiveness of test score comparisons, the time and expense required by standardized testing, the controversial relegation of a common curriculum, the narrowing of curriculum to focus teaching on test preparation, the taxpayer expense of required achievement tests, and widespread allegations of increased cheating across the country (By What Measure? 2012). Successfully measuring comparative performance outcomes is also challenging (Gratz, 2009a). Student gains in standardized achievement tests include statistical factors such as individual student's personality, characteristics, intellectual intelligence, home resources available to the student, school resources available for teacher and student use, and effects of other individuals such as past educators, parents, and role models on student learning (Darling-Hammond, 2010). Despite these arguments, the Obama administration's Race to the Top incentive grants uses these structures to tie individual teacher performance ratings directly to student test scores (By What Measure? 2012).

Staff members must clearly understand what is expected of them to earn salary increases and performance pay compensations (Callier, 2010). A common complaint from participants in operating performance pay systems is an inability to identify the components necessary to successfully earn potential bonuses (Barnett & Ritter, 2013). Effective communication is critical during development of a program, and even more so once it is implemented (Burns & Gardner, 2010). All stakeholders must have a clear understanding of required practices and outcomes to earn rewards (Barnett & Ritter, 2013). Teachers should report to the same supervisor(s) for consistent evaluation (Callier, 2010). Participants must feel confident program organization assures an even and fair playing field for all (Ritter & Jensen, 2010).

The ultimate goals of all performance pay structures should be student achievement growth (Barnett & Ritter, 2013). Merit pay bonus compensations encourage effective teachers to stay in the profession (Barnett & Ritter, 2013). Development of a structure based on reliable and sustainable measurements can provide consistent teacher evaluation, effective student growth accountability, valid identification of individual student's academic need, and support teacher excellence throughout their individual careers (Darling-Hammond, 2010).

Complications

Numerous complications exist when developing and implementing a pay for performance structure fairly accessible to all educators (Barnett & Ritter, 2013). Comparative measurements between educational colleagues are difficult as teaching methods appropriate for one student will not be effective when teaching another (Gregory & Chapman, 2012). Furthermore, students from more affluent families may successfully

achieve targeted mastery regardless of teacher inadequacies, while students with less privilege may be unsuccessful regardless of the excellence of instructors (Callier, 2010). Additionally, there are numerous other factors besides simply the teacher's skill affecting student learning (Callier, 2010). Class size, parental involvement, school resources, peer abilities, school climate, cultural barriers and student socioeconomic levels are also significant (Callier 2010).

Particularly in the lower elementary grades, a smaller population of students in each classroom was shown to be directly related to increased learner success (Chingos & Whitehurst, 2011); therefore, student learning is affected by class size (Callier 2010). Research conducted in both Tennessee and Texas examining the effects of smaller class size supports these findings (Chingos & Whitehurst, 2011). State governments face balancing the positive effects of small class size with the significant savings achieved when slightly larger numbers are permitted, and funding for performance pay programs may be financially affected (Chingos & Whitehurst, 2011).

Parental involvement also positively or negatively affects student learning, and educators have diminished influence on the amount of parental involvement each student receives (Callier, 2010). Research has shown a direct sustainable correlation between parents' participation in children's educational activities and the children's ensuing academic success (Topor, Keane, Shelton, & Calkins, 2011). Parents who are involved in actual learning activities both at home and in school events have the most profound impact on student achievement (Karim, 2010). It is beneficial for educators to find ways to encourage all parents, but especially those of disadvantaged children, to be informed, feel comfortable, and become involved in the child's education (Topor et al., 2011).

When parental involvement is absent or diminished, standardized test scores are negatively affected leaving educators struggling to fill the gap (Callier, 2010).

Studies involving performance pay bonuses for educators have revealed that extrinsic rewards like monetary compensations may realign teachers' focus away from established intrinsic rewards as new challenges are presented, therefore reducing teacher effectiveness and actually lowering desired outcome successes (Ritter & Jensen, 2010). By their existence, merit pay plans based on standardized student achievement test scores suggest a lack of teacher motivation is a primary factor in student failure and believe financial rewards are the key solution (Gratz, 2009b). This emphasizes the assumption teachers are producing less than desirable results in student achievement because they are not motivated to do their best for students (Gratz, 2009b). Pay for performance structures further usurp the belief all teachers know what practices and methods to utilize to solve student learning challenges, but simply refuse to put these structures into practice because of low financial rewards in their profession (Gratz, 2009b). Lastly, merit pay bonus systems purport financial rewards provide more significant motivation to educators than the success of their students, an idea argued by many educators as inaccurate (Gratz, 2009a).

Major barriers surrounding the utilization of past merit pay programs must also be considered, if effective programs are to be constructed and utilized successfully and sustainably (Goldhaber et al., 2008). These past challenges should be examined extensively, as the first reaction of most teachers and school employees to performance pay programs has typically been negative (Ritter & Jensen, 2010). For example, teacher unions have historically been against merit pay believing it will interfere with collective

bargaining and ultimately diminish working conditions for professional educators (Goldhaber, et al., 2008). Merit pay programs based on comparative ratings among fellow educators' achievements diminish or eliminate collaboration, a cornerstone of the U.S. educational system (Pechthalt, 2007). When teachers cooperatively work together for the achievements of the learners instead of competing for performance pay compensations, all students benefit and standardized achievement test scores are positively affected (Pechthalt, 2007).

An additional complication to consider when developing and implementing a pay for performance structure is the necessity of real and perceived fairness for all stakeholders (Toch, 2009). Numerous past attempts have been made to overcome this issue, with educational and business entrepreneurs behind merit pay initiatives often delineating requirements for fair evaluation of individual educators (Weldon, 2011). The difficulties in fair assessment and comparisons provide challenges as the elucidations are reliant on the data provided and standardized achievement tests cannot measure all pertinent aspects of teaching (Toch, 2009). Despite these challenges, most educational professionals conclude the appropriateness of teacher rewards for individuals who willingly accept additional responsibilities and receive greater compensation (Elliot & Butrymowicz, 2013).

The most noted and controversial complications involve the expansion of value-added models (VAM) as a significant part of teacher evaluation within merit pay programs (Darling-Hammond, 2010). If value-added models are utilized for educator performance pay compensations, standardized curriculums and achievement tests must be developed for all courses and grade levels in order to fairly provide evaluations for all

teachers in the school environment (Deubel, 2011). Utilizing additional standardized testing instruments would increase the amount of time each year students are engaged in testing, decreasing instructional time significantly (Darling-Hammond, 2010). Consequently, additional standardized achievement tests would significantly increase expenses necessary for the development, implementation, and maintenance of such measurement instruments (Deubel, 2011). Additionally, research has suggested most value-added models may be difficult to consistently measure and may contain inaccuracies when utilized for a large population (Darling-Hammond, 2010).

Professional educators believe merit pay programs encourage greater emphasis on narrowed teaching curriculum focused primarily on achievement test results (Podgursky & Springer, 2007). Opponents further tout that performance pay systems often encourage a restructuring of academic procedures and methods that borders on cheating in order to gain impressive student results (Ritter & Jensen, 2010). An unprecedented number of California educators were suspected of some form of cheating on state standardized tests, with teachers from 23 schools in 21 districts facing charges in 2010 (Blume, 2011).

During 2011, Georgia governor Nathan Deal conducted an extensive investigation revealing widespread duplicitous practices had occurred during annual student standardized testing by teachers in 44 of Atlanta's public schools (Severson, 2011) The scandal involving 178 teachers and administrators received national attention, with numerous charges even brought against the former National Superintendent of the Year, Beverly Hall (Niesse & Rankin, 2014). Administrators charged in the Atlanta scandal reported they were pressured to cheat in order to achieve adequate yearly progress required by federal mandates for funding (Niesse & Rankin, 2014). Similar allegations

have been made in Houston, Philadelphia, and Washington, DC (Weldon, 2011). On April 1, 2015, 11 former Atlanta educators were convicted of racketeering (Jarvio, 2015). In the years since the scandal surfaced, Atlanta public schools has established an anonymous hotline to obtain reports of suspected ethics violations and eliminated all monetary rewards tied to test scores (Blinder, 2015).

Narrowing of broad curriculums and focusing on retention of test information can have a strong negative impact on overall student learning (Berger, 2013). Teachers should routinely take the time to establish the understood relevance of the topic or concepts being taught (Sutherland, McLeod, Conroy, & Cox, 2013). Without established relevance, students only memorize facts, a low level learning practice, instead of seeking to comprehend and synthesize new information (Berger, 2013). Robin Roberson (2013) of the American Psychological Association stated:

> From my educational experiences—23 years as a student, 10 years as a public school teacher, and currently as a university teaching assistant—I am convinced that relevance is one of the most important aspects of teaching and learning. I know that as a student, the content I found most relevant was the easiest to learn, so as a teacher, I believe it is my job to help students see the relevance in content they may not find inherently interesting. (para. 2)

Professional educators focusing on teaching to the test may neglect this critical component of instruction (Berger, 2013).

Some educational leaders consider value-added models to be a more equitable measurement of individual student progress and testing data when compared to students' performance over time (Deubel, 2011). When there is uniformity of expectation from

location to location across the nation, these models encourage prioritizing of subject matter, while limiting the omission of subject matter teachers are less inclined to teach (Darling-Hammond, 2010). This uniformity of subject matter introduction necessitates a standardized state or national curriculum in order to assure fair comparisons (Deubel, 2011).

Collaboration among teachers is a positive cornerstone of American educational systems (Solmon & Podgurksy, 2001). According to Jackson, Kirabo, and Bruegmann (2009) seasoned teachers can have a measurable and positive effect on their less experienced colleagues, thus strengthening the school environment and producing greater academic successes among students (Jackson et al., 2009). Pay for performance structures, when inadequately constructed, can damage this system and negatively affect overall teacher performance (Jackson et al., 2009).

Unless structured and maintained correctly, performance based pay programs encourage competition and consequently decrease student academic growth and standardized achievement test results (Solmon & Podgursky, 2001). When monetary compensation is based on performance, ranked comparatively with educational colleagues, collaboration can be replaced with competition (Jackson et al., 2009). Inexperienced and struggling teachers do not have the opportunity to learn from more accomplished peers and educational quality and student academic success can diminish (Jackson et al., 2009).

The critical significance of teacher collaboration is recognized by many professionals who support merit pay programs (Podgursky & Springer, 2007). Many merit pay program designs include components requiring group efforts and collaborative

activities (NFL Public Forum Handbook, 2009). Cooperation among professional educators can be stimulated through monetary incentives awarded to educators who document and share positive classroom techniques with co-workers (NFL Public Forum Handbook, 2009).

Educational leaders believe that highly competent teachers naturally and automatically peer collaborate, unless discouraged against the practice (Elliot & Butrymowicz, 2013). Collaboration benefits students by combining various strengths and talents found within a team of teachers (Clabaugh, 2009). Healthy collaboration also strengthens the learning environment with a blending of teaching styles to better meet the needs of a variety of learners (Clabaugh, 2009).

Political Push

On April 9, 1965, President Lyndon B. Johnson's groundbreaking Elementary and Secondary Education Act (ESEA) was passed only a few months after it was first introduced (Miller, Hess, & Brown, 2012). Constructed by Francis Keppel, the U.S. Commissioner of Education, the ESEA denoted the federal government's first definitive steps to significantly funding and regulating public school education in the U.S. (Hanna, 2011). The original and primary goal of the ESEA was an improvement of all U.S. public schools educational quality, specifically targeting low income regions by delivering federal aid to schools serving high poverty populations (Miller et al., 2012). In Section 9101 of the ESEA, the need for highly qualified teachers is clearly outlined (U.S. Department of Education, 2014). In Section 9101, highly qualified teachers were designated based on years of experience, administrator and peer recommendation, and ability to assist and mentor other teachers (U.S. Department of Education, 2014).

In 1983, President Ronald Reagan received a landmark report entitled, *A Nation at Risk*, organized by U.S. Secretary of Education Terrel H. Bell, and compiled by the National Commission on Excellence in Education (Solis, Bannerjee, Tomko, & Baker, 2013). This report delineated areas of concern regarding the nation's educators including inadequate teacher preparation programs, inadequate salaries and compensations, and inability of the profession to retain highly qualified individuals (National Commission on Excellence in Education, 1983). After *A Nation at Risk* was published, President Reagan proposed two solutions: merit pay for teachers as a substantial proponent for positive change in education and a drastically reduced role of the federal government in public education (Strauss, 2011). Reagan immediately called for the development of a solid merit pay system for U.S. educators (Strauss, 2011). Many political leaders and national education organizations opposed the idea of merit pay stating reasons such as arbitrary measurements of teacher performance and issues regarding sustainable funding, and the proposed and developing new programs were eventually quietly forgotten and abandoned (Solis et al., 2013).

President Bill Clinton resurrected the idea of performance pay for teachers as an avenue to increase the success of public school education across the nation (Government Printing Office, 1996). In an address to the National Governors Association Education Summit (1997), President Clinton stated:

> I also believe anytime you're trying to hold teachers to higher standards they should be rewarded when they perform. I know that in South Carolina and Kentucky, if schools markedly improve their performance, they get bonuses and the teachers get the benefit. (Government Printing Office, 1996, p. 578)

The following year, President Clinton vetoed the Education Savings and School Excellence Act and the idea of nationally funded merit pay for teachers once again disappeared (Government Printing Office, 1996).

President George Bush amended and supplemented President Johnson's 1965 ESEA on January 8, 2002, with his administration's educational policies designated in the NCLB Act (Springer et al., 2009). According to the mandates of NCLB (2002), all public school teachers must be deemed highly qualified (U.S. Department of Education, 2004). Highly qualified status indicates professional educators have obtained a bachelor's degree, maintain full state certification or licensure, and prove that they know each subject they teach (U.S. Department of Education, 2004). A critical component of No Child Left Behind was mandatory testing for all students in grades three through eight each year (Lohman, 2010). Another component of NCLB encouraged monetary rewards for teachers based on student standardized academic test scores (Pechthalt, 2007).

When President Obama assumed office in 2009, he and his Cabinet included performance pay for educators in their goals for educational improvements (Gratz, 2009a). Through the American Recovery and Reinvestment Act of 2009 (ARRA), roughly $5 billion was set aside to fund the U.S. Federal Government Department of Education's Race to the Top initiative, which includes a push for performance pay structures for teachers directly linked to student achievement (Whitehurst, 2010). Since Race to the Top implementation, confusion and disagreements have occurred regarding distribution of performance pay compensations tied to student standardized achievement test scores, with promised government funding sometimes being withheld due to differing interpretations of program requirements (Weis, 2013).

Summary

Limited research exists regarding the sustainable effectiveness of merit pay programs. What is clearly missing is an assessment of commonalities identified within successful programs. An examination of selected school districts in the United States with performance pay models currently in practice, as well as those utilized in the past, could determine basic components necessary for successful implementation of merit pay for educators.

Poorly structured programs can actually yield negative consequences on teacher effectiveness and student achievement (Toch, 2009). Programs initially thought successful have found sustainability difficult over time (Dee et al., 2005). Identification of simple components common to programs successfully sustained over time is essential to support for future program structures. Increases in student achievement, the goal of every performance pay program, can then occur more readily and consistently.

Through this study, merit pay programs were examined to determine common components that produce successful and sustainable growth in student achievement. The educational background of teachers, including various degrees, coursework, and years of teaching experience, has little bearing on student achievement (Solmon, 2005). In addition, only a small number of studies have been conducted to evaluate the effectiveness of merit pay as a tool for increasing student success (Goodman & Turner, 2011). Podgursky and Springer (2007) studied various merit pay programs for educators around the world to examine the propensity of these programs to positively affect student achievement. Successes in other states have occurred when teachers were involved in all steps of the design process (Jupp, 2005). Information has not been largely examined to

determine what denotes a successful performance pay structure, but successes have been documented to suggest more research is needed to outline criteria for successful implementation (Podgursky & Springer, 2007).

In Chapter Two, a review of literature related to merit pay program goals, teacher motivations, the sustainability of past and existing merit pay programs, assessments of existing programs, complications of programs, and the political push for successful merit pay programs was presented. The research design outlined for the study and the methodology used to analyze the discoveries were presented in Chapter Three.

Chapter Three: Methodology

Pay for performance programs for teachers are a controversial subject often debated by educational professionals and political leaders (Goldhaber et al., 2008). Historically, most attempted pay for performance programs for public school educators had significant positive results when initially implemented, but experienced devastating challenges over time rendering them unreliable and unsustainable (Wilms & Chapleau, 1999). Educational reforms are currently widely discussed and tested as the U.S. government searches for reliable and effective ways to significantly transform and improve current public education systems' standards and practices in order to compete on the world stage (Springer et al., 2009).

President Barack Obama's Race to the Top initiative, funded by the President's American Recovery and Reinvestment Act (2009), strongly encourages state education departments and local public schools to develop pay for performance programs for public school educators directly linked to student academic gains as measured by standardized achievement tests (Whitehurst, 2010). The essential need for high-quality teachers is commonly recognized and readily acknowledged by many political and educational leaders as a critical component toward measurable and sustainable increases in student academic achievement (Rose, 2010). The introduction of pay for performance plans as a motivational tool evokes strong opinions, both positive and negative, from educational professionals, educational unions, business leaders and political frontrunners (Weibel, Rost, & Osterloh, 2010).

Linking teacher evaluations and ultimately educators' monetary compensation to student academic growth as measured by standardized achievement testing evokes even

greater opposition from many groups (Whitehurst, 2010). The purpose of this study was to examine current and historical educational pay for performance programs to identify common components that produce proven, significant and sustainable gains in students' academic achievement.

The mixed methods study design employed qualitative data through interviews. Quantitative data were obtained through respondent surveys and secondary data bases (achievement test scores). Commonalities were noted among the three instruments. Triangulation of data permitted cross-checking, which strengthens both reliability and internal validity of information (Marshall & Rossman, 2010).

Research Questions

Key components defined for receipt of merit pay awards were examined. Public schools in two Midwest states were utilized in the study. Each of these schools has participated in a pay for performance program. Interviews were conducted in various schools from one school district. The following research questions were examined in order to determine common components of performance pay programs which have shown significant, documented, and sustainable increases in student academic achievement.

1. What key principles and components guide merit pay programs?
2. What is the connection between merit pay and academic achievement?
3. What are the perceived effects of merit pay?

Methodology

The application to conduct research was submitted to the Institutional Review Board (IRB) of Lindenwood University for consideration. Approval (see Appendix A)

was obtained and research began. The design of this study was mixed, employing both qualitative and quantitative data. Research data were collected, analyzed, organized, and graphed for reliable numerical assessments to denote comparative similarities of selected performance pay programs' components. In addition, interview transcriptions and survey open-response comments were carefully investigated, organized, coded, and themed to allow reliable interpretations of educators' opinions toward established pay for performance programs, the positive and negative impacts of such programs, program shortcomings, and program successes. Information was scrutinized and organized into tables for further review. Data were then tallied using a frequency chart. Results were ordered into a graph for systematic comparison and review.

Research Setting and Participants

This study was conducted entirely in schools with current or past experience with educator performance pay programs. Teachers were surveyed regarding personal opinions and perceived successes of merit pay. This study also included innovative merit pay model elementary schools in Arkansas. These schools were investigated to determine the approach used to structure merit pay and the successes or failures experienced.

Interview participants were selected based on experience with the performance pay model. Interviews were conducted with three educators and three administrators. They represented a population of 1,182 students ranging from pre-kindergarten through fifth grade. The student populace was 77% African American, 19% Hispanic, and 3% Caucasian. The remaining 1% was listed as two or more races. Ninety-six percent of the students served by this school are documented for free or reduced price meals. There

were 109 members on the professional staff team, including administration, support personnel, and 58 classroom teachers. The average daily attendance rate was 95.7% (Arkansas Department of Education, 2014).

A letter of introduction and permission was provided to the district's superintendent (see Appendix B). Three district schools were identified based on their involvement in the model pay for performance program. Principals at these schools were contacted by telephone and meetings were scheduled. At these meetings, letters of informed consent for interview participants (see Appendix C) and audio release forms (See Appendix D) were provided, discussed, and signed. Each principal was then interviewed, and each principal chose one teacher from his or her building who had participated in the pay for performance structure to also complete a voluntary interview. General research was conducted on programs in other states in order to examine a variety of performance pay programs for comparisons regarding specific components affecting program sustainability and success.

Data Collection Instruments

The following data collection instruments were used:

Interviews. After examining the review of related literature, two primary concerns were noted. One involved the effects of merit pay on student achievement. The other related to the sustainability of performance pay programs over time. Interview questions were constructed to identify perceptions and beliefs related to these topics within existing identified performance pay systems for educators. A draft was taken to an assembled research focus group of both doctoral students and educational professionals. This group reviewed the interview questions and offered criticisms and

suggestions. The final decisions on what questions to be included in the interview were then determined. Interview questions (see Appendix E) were utilized as a guide allowing flexibility in conversation to evoke richer, more detailed elaboration and information. Interviews were conducted with three educators and three administrators from different schools of one district.

Confidentiality and anonymity were assured; the respondents' identities will not be revealed in any publication or presentation. It was stated to each participant no anticipated risks or benefits were attached to interview participation. Potential interviewees were informed their participation was voluntary and their consent to participate could be withdrawn at any time. Participants were informed they could refuse to answer any questions they preferred not to discuss. Interviewees were told that all information would be kept in a secure location until completion of the study, at which time it would be destroyed.

Interviews were conducted at each educator's school of employment in a quiet and private office selected by the administrators. Interview sessions were scheduled to last approximately 30 minutes. Interview questions were designed to be straightforward, clear, and simple to understand. Deceit of interviewees was not employed. All respondents were assured they could choose not to answer any particular question or questions, should they desire to do so. Interviews were recorded using two different devices simultaneously to provide backup in the event of any unexpected technological malfunctions. Interviewees were invited to elaborate and expand on any or all questions or points they wished, in an effort to collect as much pertinent data as possible. At the

conclusion of each interview, participants were given the opportunity to share any additional information or concerns they held regarding performance pay for educators.

Upon completion of the interview, recordings were transferred to a secured backup storage device, then transcribed verbatim, and carefully reviewed for accuracy. Interview participants were assigned codes during transcription to conceal their identity, as assured. The simple coding utilized was as follows: Administrator One (A1); Teacher One (T1); Administrator Two (A2); Teacher Two (T2); Administrator Three (A3); Teacher Three (T3). Transcriptions were then carefully analyzed for common themes, beliefs, and opinions.

Secondary databases. Achievement test scores on state standardized tests were used as an indicator of student achievement and growth. Test scores served as a measure of merit pay program success. Testing data records before, during, and after performance pay program implementation were examined.

Surveys. The review of related literature served as a foundation for the development of the survey (see Appendix F). Subtopics regarding merit pay were noted and questions drafted to support the identified groupings. This survey was created to reveal beliefs and opinions of educators who had prior experience with performance pay programs for educators. The preliminary survey outline was taken to an assembled research focus group of both doctoral students and educational professionals to be critiqued. The focus group members were asked to formulate possible new questions as deemed necessary for consideration and final selection. Final questions and statements were formulated using a Likert-scale and an open response to determine educators' opinions of performance pay programs, the observed effects of performance pay on

teacher motivation and practices, components vital to performance pay structures, and most importantly educators' perceived effects of merit pay bonuses on student academic growth and achievement. Effort was made to construct a clear, concise, and easy to complete survey, allowing busy educators the opportunity to share their opinions while respecting their time commitments.

A request for survey participants was sent via electronic mail (e-mail) to the principals of schools selected based on experience with merit pay for educators. Surveys were then distributed and collected using SurveyMonkey to educators in those schools. The data collection tool was sent to a total of 5,810 public school teachers and administrators in selected school districts. Each district had participated or was participating in various types of performance pay programs.

Prospective survey participants were sent an initial message with a brief introduction of the researcher and a concise explanation outlining the study (see Appendix G). In this introduction, the purpose of the study was briefly explained. In addition, participant confidentiality practices were clarified and assured. An invitation to participate was given, along with an online link to the survey. Participation was completely voluntary and anonymous, as was explained in the survey introduction.

Stimulating survey participation proved challenging, with few completed responses received after initial introduction of the survey. Participants who did not respond received a reminder message prompting them to complete the survey. This reminder included a request to contact the researcher via e-mail to clarify any concerns or address any questions. From this communication, 22 e-mail inquiries were received, including concerns over possible robotic communications, computer virus infections, and

other online threat concerns. No clarifications were requested regarding survey questions or the purpose of the project. A total of 798 survey responses were obtained.

Data Collection Procedures

Opportunistic sampling, also referred to as convenience sampling, occurs when research participants are selected from naturally occurring groups (Mertens, 2014). Opportunistic sampling was employed for the online survey tool. A list of school districts in one Midwest state was obtained from the state's Department of Education. SurveyMonkey was used to create and deliver surveys to study participants in the selected schools. Surveys of both teachers and administrators were conducted at selected schools. Written copies identical to the SurveyMonkey instrument were available and offered to participants who were unfamiliar with or unwilling to use technology. This design was structured to encourage the greatest number of possible responses from survey participants.

Purposive sampling occurs when research participants are selected based on experiences and therefore knowledge of a population as it relates to the problems and purposes of a study (Mertens, 2014). Under the domain of purposive sampling, criterion sampling was utilized to select interview participants. Criterion sampling occurs when a researcher designates criterion and selects individuals to fit the specific criteria (Mertens, 2014). Interviews were conducted of six selected participants taken from two specific groups. Group one was comprised of classroom educators employed in public schools that have participated in a performance pay program for educators. Group two interviewees were school administrators who have supervised in a public school where performance pay programs have been utilized. Participants were introduced to the study

and invited to participate through a written letter. Phone contact was made to schedule appointments at participants' convenience. Informed consent was given, then interviews were conducted in-person at the public schools, in a private location such as a classroom or office. Each interview was recorded digitally for transcription at a later date, with the permission of the interviewee.

Interview transcripts were carefully scrutinized and analyzed to denote common themes. Themes were coded and examined before conclusions were drawn. Survey results were tallied, analyzed, and organized into graphs. Investigations were also conducted using existing secondary data regarding the successes and shortcomings of various merit pay programs. This analysis was carefully evaluated and compared to verify valid documentation of claims.

Internal Reliability and Validity

Threats to internal reliability and validity were minimized through various methods and procedures. Data collector bias was minimized in surveys and interviews through the use of a research focus group comprised of doctoral students and educational professionals. The primary responsibility of this group was to scrutinize and evaluate survey questions and interview queries to detect potential bias. Leading questions, question order, and clear question focus were examined, suggestions were made, and corrections completed before the completed instruments were utilized.

Analytic Procedures

Data obtained through this study were analyzed carefully and methodically. Survey responses were analyzed using descriptive statistics. Data were organized using measures of central tendency and presented through frequency charts and bar graphs.

Comments and interview responses, due to their more abstract nature, were analyzed using a qualitative constructivist approach. Qualitative research is an investigation of the meanings, reactions, and interpretations individuals have developed through their life experiences (Flick, 2014). The goal of the constructivist approach to research is a balanced representation of individual views through guided interactions (i.e. interviews) between researchers and participants (Creswell, Klassen, Plano-Clark, & Smith, 2011). Interview responses were methodically examined for common words, collective ideas, and shared opinions. Through multiple transcript reviews, patterns, and themes from individuals' responses were noted, categorized, and color-coded for effective and systematic interpretation and review. Simple frequency tables were utilized to identify dominant commonalities in responses. Interview transcripts were then dissected with noted themes grouped together for further interpretive comparison and review. Finally, excerpts and summaries representative of noted common themes were presented in the analysis of the data.

Ethical Considerations

Informed consent was acknowledged from all participants. Individual participants and participant school districts will remain anonymous. Research data will be retained in a locked file until three years after completion of the project and then destroyed. No threat of physical or emotional harm existed to participants. Deception was not employed as a component of this study. Information was reported accurately and without bias.

Summary

Evaluating, comparing, and compensating public school teachers for classroom performance are complicated, heated, and currently widely-debated issues. Pay for

performance programs are designed to address the need for high-quality teachers in U.S. public schools, but many questions exist as to the reliability and sustainability of such programs. Many educational and political leaders support the implementation of varied pay for performance structures as motivational tools for professional educators. Other educational stakeholders and decision-makers strongly oppose the practice, citing unfair evaluative measures and ineffective means of comparison.

General research was conducted on merit pay programs for educators around the country. From this general investigation, basic research questions were constructed and evaluated. A cohort team of doctoral candidates and educational professionals assisted with examination and construction of final questions for effective research. Personal interviews with school administrators and teachers were conducted in one Arkansas school district. Interviews were transcribed, scrutinized, and coded for themes and trends. Online surveys of classroom teachers and school principals from Missouri schools who have participated in performance pay systems were completed and analyzed. Survey results were then organized into tables and graphs for effective comparative examination.

An examination of secondary data sources, including state standardized achievement data, allowed for triangulation of data and thereby strengthened the reliability of the results. Through this study, positive and negative opinions toward merit pay procedures and programs were also examined.

Identification of vital components and practices common to successful and sustainable pay for performance programs currently being utilized were sought. Identification of these components and procedures could provide a valuable resource for

future educational leaders attempting to implement a successful merit pay program in other school districts or state-led organizations. In chapter four, the analysis of data was described. Graphs were constructed to depict survey responses. Answers from interviews were also shared.

Chapter Four: Analysis of Data

The purpose of this study was to evaluate the successes and challenges of the development, implementation, and maintenance of merit pay programs for educators in the public schools. Pay for performance programs, designed to stimulate increased teacher efforts toward improving students' academic growth, are viewed by many educational leaders as a significant component of positive change (Gratz, 2009b). President Obama urged state and local education systems to design and implement merit pay programs linked to student achievement through the AARA (Whitehurst, 2010).

Specifically, the purpose of the study was to examine performance pay program components identifying key elements that produced significant and sustainable growth in student achievement. A mixed methods design was employed to evaluate public school teachers' and administrators' experiences and perceptions with merit pay programs. Specific data regarding student growth and achievement were utilized as well.

Fundamental components delineating how merit pay award compensations are disseminated were examined. The perceived and documented successes of pay for performance programs for educators were also considered. Selected public schools in two Midwest states were utilized in this study. Each of the school districts researched had participated in a pay for performance program for educators. An online survey was constructed and reviewed by a cohort team of doctoral students and educational professionals. This survey was sent directly to teachers and administrators in selected school districts through e-mail. A total of 5,810 recipients received online surveys through e-mail via SurveyMonkey. Upon conclusion, 14% of recipients had completed the survey.

The survey queries were used to identify commonalities of opinion regarding the design and implementation of merit pay programs from public school teachers and administrators. The 798 survey participants responded using a Likert Scale for queries one through 13 and a constructed open response for query 14. Survey results were analyzed multiple times and coded to determine common themes. Identification of common respondent themes provides a deeper and clearer interpretation of participants' opinions and experiences (Creswell et al., 2011). Data from the surveys were organized into various charts, tables, and graphs to break down, clarify, and study the information. Using this information, results were summarized and recorded. From these results, frequently occurring common components were identified.

A special focus of both surveys and interviews was placed on one school district. Several schools in this district were specifically selected due to participation in an innovative, privately funded and privately managed merit pay program for educators. Funding was provided by a consortium of private foundations spearheaded by an educational philanthropist. The philanthropist is highly committed to educational reform and frequently donates to programs dedicated to improving quality of life (Barnett & Ritter, 2013). The pay for performance structure was designed as a pilot project for study. Proponents hoped to create a structure that could be replicated in other successful school performance pay systems. One feature of the program setting it apart from most other merit pay programs is the fact that rewards paid out were not for classroom teachers only. All staff at the school throughout the year was included in the payout, including teachers, administrators, support staff, cafeteria workers, custodial staff, and others. This

concept was based on the idea that all school employees, regardless of position, impact the learning environment of students (Barnett & Ritter, 2013).

Interview participants were selected using criterion sampling from one Arkansas district. Criterion sampling (also referred to as purposeful sampling) is commonly utilized in qualitative research as a quality control assurance, targeting individuals who meet specific desired criteria relevant to the study (Creswell et al., 2011). This district had implemented a pay for performance program opportunity available to all educators. Six participants were selected for interviews from an Arkansas public school district. The first group was comprised of three public school administrators. The second interview group included three public school teachers.

Each interview was recorded digitally for transcription, with the permission of the interviewee. Digital files were transferred to a secured location upon completion of the interviews. The interviews were transcribed verbatim. Interview transcripts were carefully scrutinized and analyzed to denote common themes. Themes were coded and examined before conclusions are drawn.

Investigations were also conducted using secondary data regarding the successes and shortcomings of the targeted merit pay program. These data, specifically student standardized test scores, were carefully evaluated and organized to denote trends. All sources of information were then compared to determine commonalities. This triangulation of data serves to produce more valid and reliable formulated results.

Research Results

This chapter was constructed and organized into three phases to provide a

structured summary of information gained from surveys, interviews, and the examination of relevant secondary databases.

Phase 1: Survey outcomes. From 5,810 survey invitations sent, only 14% of recipients participated in the survey. A total of 4,815 invitees chose not to complete the survey, and 798 survey responses were collected. Twenty-one educators opted out of the survey or had previously opted out of communications from any SurveyMonkey researcher, effectively negating further contact. One hundred seventy-six (3%) of the provided e-mail addresses bounced, indicating they were inaccurate or no longer active (see Figure 1).

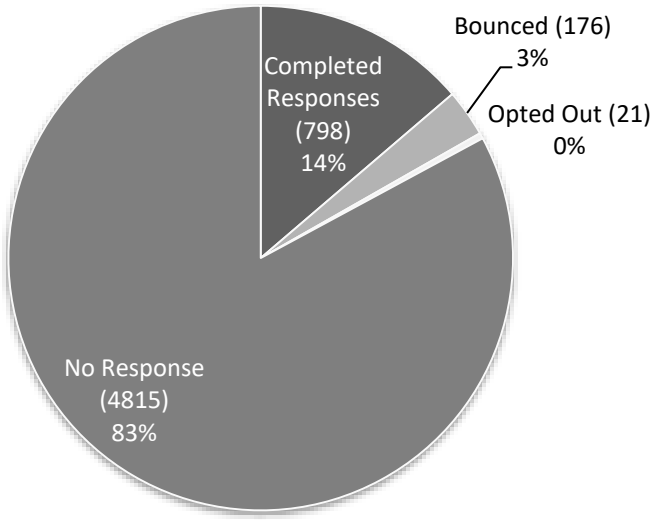


Figure 1. Survey response breakdown

Participants responded to 13 survey queries using a Likert Scale rating. The following selections were available: *strongly disagree, disagree, no opinion, agree, and strongly agree*. These 13 queries were designed to explore the experiences and opinions of the participants regarding pay for performance practices. The initial two questions of

the survey were constructed to assure that respondents had participated in a pay for performance program for educators prior to completion of the remaining survey queries. These questions were not investigated for patterns in data, since the information contained was not relevant to the purpose of the study.

The final query of the survey, item 14, asked respondents to freely discuss components of merit pay they believed significantly impacted student achievement. Participants' constructed responses were scrutinized carefully multiple times. Data were noted for common themes, then categorized and graphed for further review and study.

Survey query number three. An important part of the study was to determine how educators feel merit pay has affected classroom instruction and professional responsibilities. Most professional educators are primarily motivated by intrinsic factors such as helping others or making a difference rather than extrinsic motivators like monetary bonuses (Callier, 2010). If used improperly, extrinsic rewards intended as a chief motivator can have an opposite, negative effect, moving professionals' focus toward the monetary reward (Pink, 2009). Monetary bonuses cannot be ignored however, as dedicated, hardworking teachers' enthusiasm can weaken over time if no rewards or recognitions are provided or their efforts (Odden & Kelley, 2002). This query was utilized to explore the perceived effects of different merit pay programs on educator effectiveness.

Respondents were given five response choices on a Likert Scale. From all participants, nearly half indicated they agreed or strongly agreed that pay for performance had increased their effectiveness as an educator. Less than one third of participants disagreed or strongly disagreed with this statement. Of the remaining respondents,

almost one-fourth indicated they had no opinion. The mode responses to the Likert Scale were 3 and 4, with 109 responses each (see Figure 2).

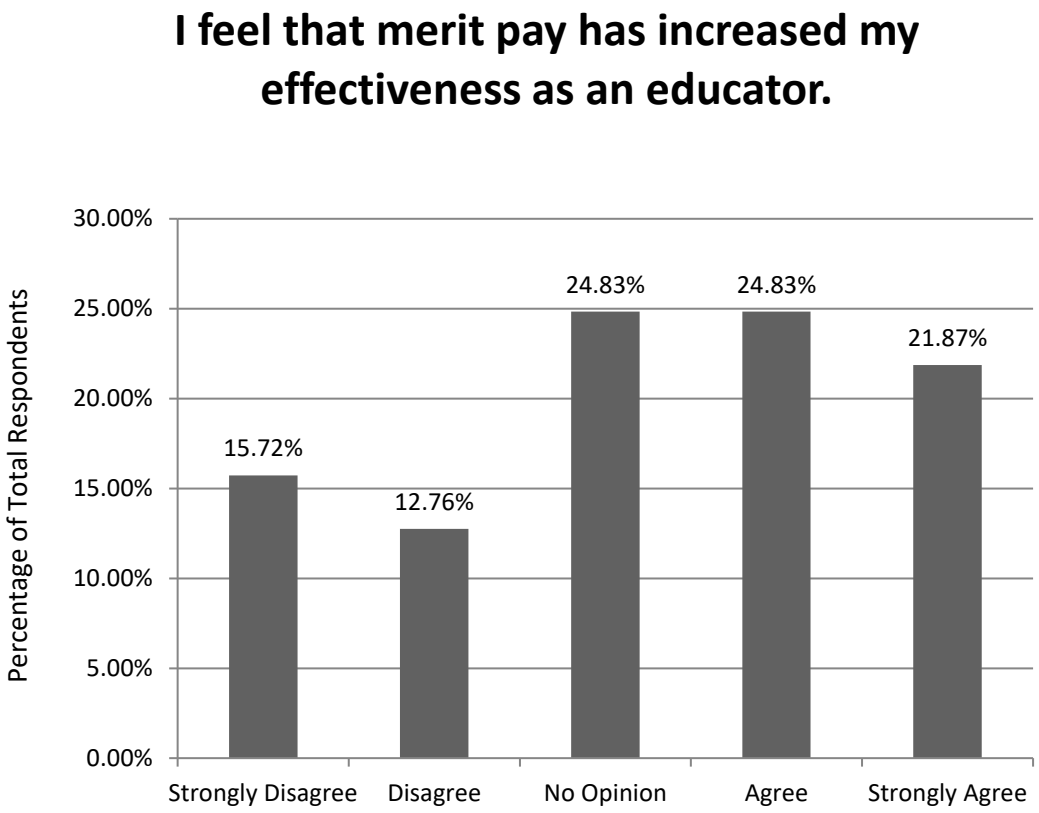


Figure 2. Survey query three

Survey query number four. Identification of basic factors utilized in successful merit pay programs, specifically those that have been maintainable over time provides significant benefit to designers structuring new programs. Developers of structures showing great initial success have found sustainability difficult over time (Dee et al., 2005). Teachers who design and implement a before or after school program primarily to earn performance pay may abandon the program if bonus compensations are reduced or removed. Survey respondent 76 stated:

> I feel like it (performance pay) gives teachers incentive to do extra things like tutoring and after school clubs. Teachers spend lots of extra time at school

already and I think students benefit from activities like this but with no incentive may teachers are not going to be able to justify the time spent away from family or other jobs to do these programs.

This query was structured to explore motivations and attitudes of educators' choices regarding extra programs for students. Answer choices for this question were limited to *yes* or *no*. Over half of all participants responded affirmatively, indicating that the possibility of performance pay bonuses had motivated implementation of a before or after school student program (see Figure 3).

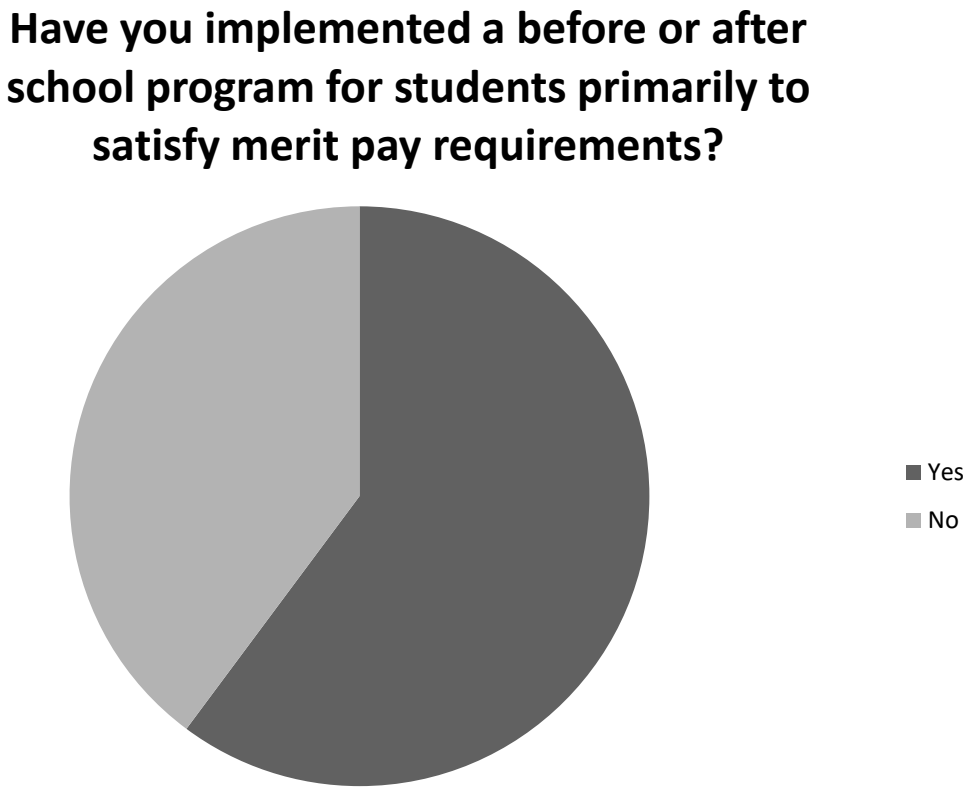


Figure 3. Survey query four

Survey query number five. Through this query, the student population utilizing the before and after school programs implemented through performance pay programs for

educators was explored. Maurice Elias (2009) of the George Lucas Educational Foundation stated:

> The feeling of being engaged in a setting or group happens when students have opportunities … can spend time in environments in which teamwork is encouraged, and get help learning new skills that they find valuable and helpful in their lives. Particularly for students who are in disadvantaged circumstances, spending time in engaging settings both in school and after school is important. (para. 8)

Students can benefit from after school programs tailored to fit their needs. However, program success is dependent on target audience participation.

Respondents were given five choices on a Likert Scale. From the total respondents, a large majority, almost four-fifths of respondents, either agreed or strongly agreed with this statement. In contrast, slightly more than 10% of all participants selected either disagree (6.12%) or strongly disagree (5.04%). The remaining 8.99% selected no opinion. (see Figure 4).

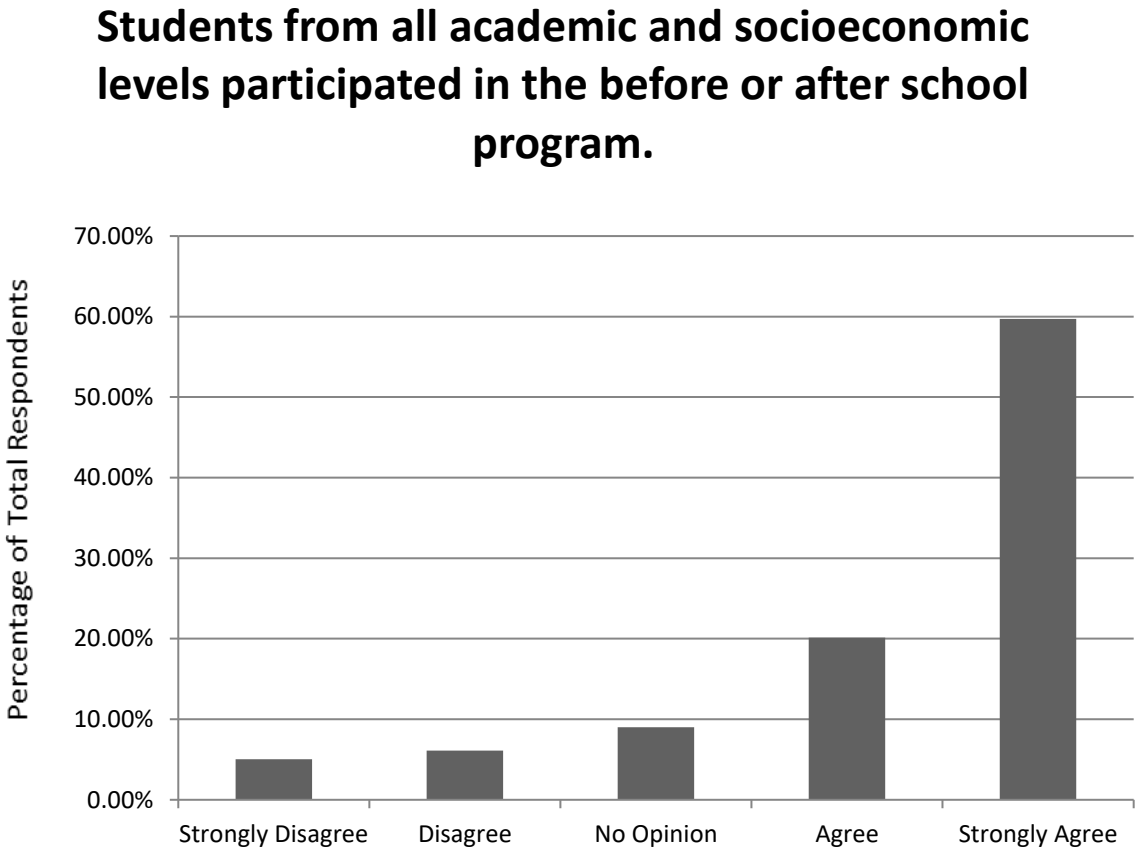


Figure 4. Survey query five

Survey query number six. Participants were given five responses on a Likert Scale. Over half of respondents either agreed or strongly agreed with the statement. Nearly one-fourth of participants had remained neutral on this statement. Less than 20% of those surveyed selected disagree or strongly disagree. The mode response was five (see Figure 5).

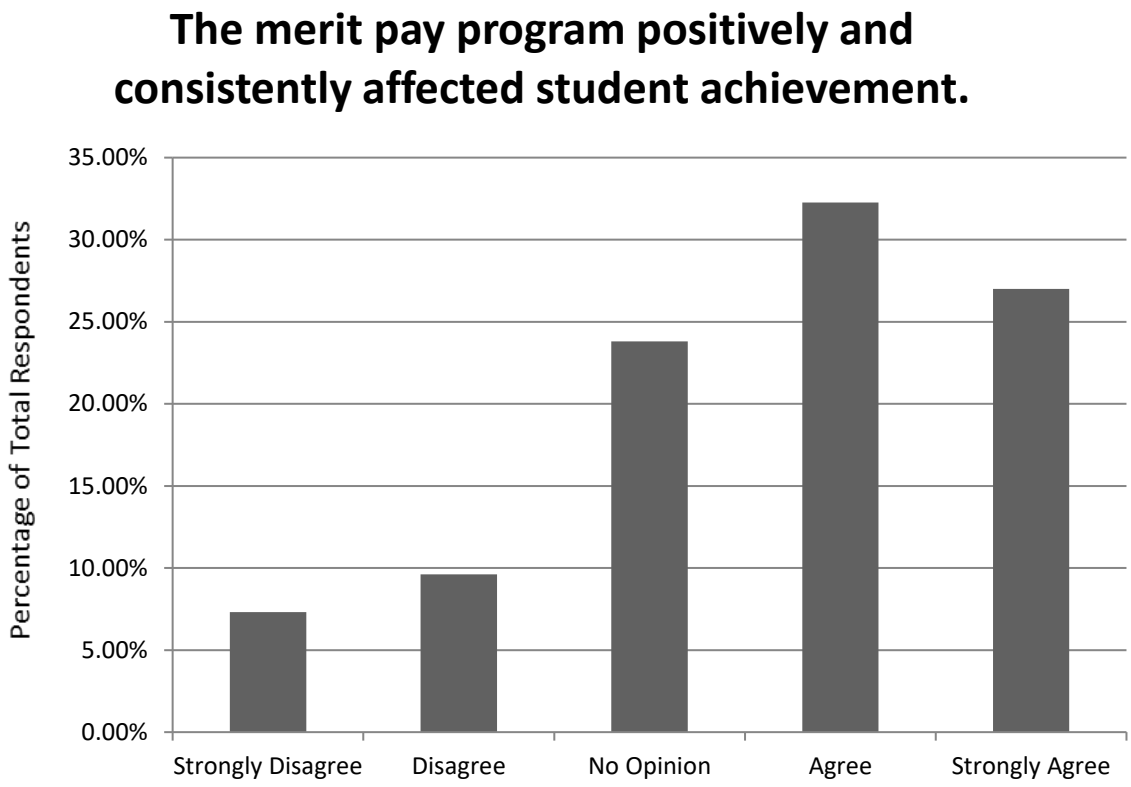


Figure 5. Survey query six

Survey query number seven. Any type of performance pay structure for educators is created to motivate teachers to perform their professional responsibilities to the best of their abilities. Query seven had five response choices displayed on a Likert Scale. The mode response was four. The greatest number of respondents either agreed or strongly agreed with this statement. In the one and two (strongly disagree to disagree) categories, 28.64% of individuals placed their response. The remaining survey participants chose no opinion. The majority of responses was *strongly agree*, with 26.82% of the total (see Figure 6).

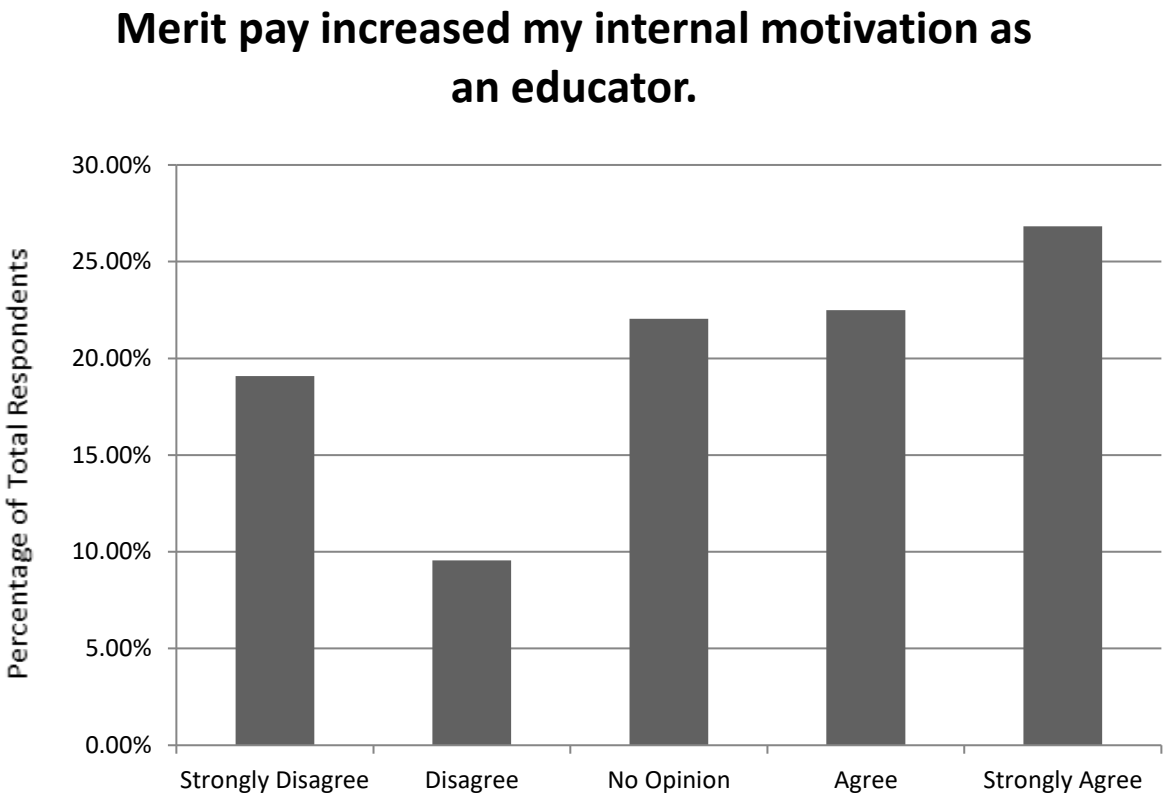


Figure 6. Survey query seven

Survey query number eight. Through this query, actions taken by professional educators to strengthen and improve their professional efforts in order to qualify for merit pay bonuses were specifically explored. Respondents made their selections using a Likert Scale rating. Nearly half of all participants selected either agree or strongly agree response. Over one-fourth of all respondents disagreed or strongly disagreed that merit pay bonus possibilities had caused their external professional efforts to increase. The remaining one fourth selected no opinion. The mode response was four (see Figure 7).

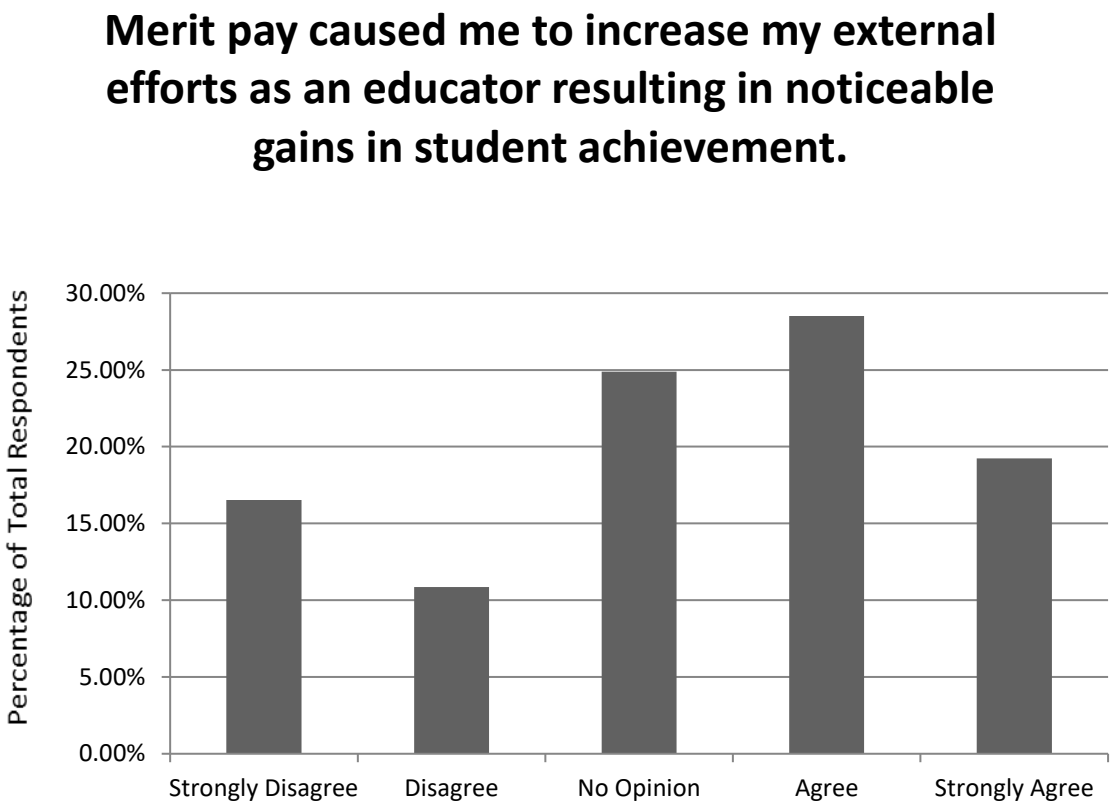


Figure 7. Survey query eight

Survey query number nine. Query nine had five response choices displayed on a Likert Scale. The mode response was one. Of the total respondents, over one third strongly disagreed with this statement, while 17.42% disagreed. No opinion was selected by nearly one fourth of respondents. Slightly less than one fourth of respondents either disagreed or strongly disagreed that merit pay had caused an increase in their professional efforts (see Figure 8).

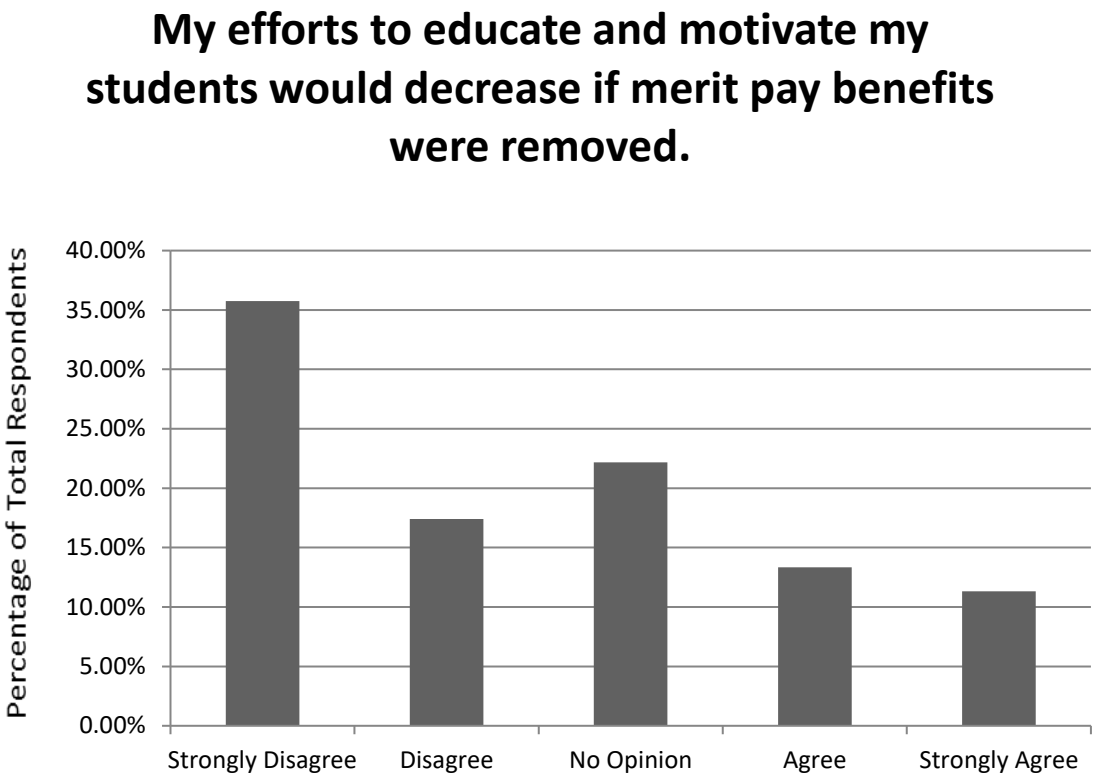


Figure 8. Survey Query Nine.

Survey query number ten. Collaboration between educators provides a strong foundation of mentoring and development to beginning and experienced teachers (Pechthalt, 2007). Opponents of pay for performance structures believe offering bonus compensations to teachers cause competition and damages collaboration, therefore diminishing educators' overall positive impact on students (Clabaugh, 2009).

Query Ten had five response choices displayed on a Likert Scale. Opinion responses showed discord regarding this statement. A combined 35.24% either agreed or strongly agreed that merit pay increased the amount of collaboration among professional educators. Nearly one fourth (24.26%) of respondents chose no opinion and 41% disagreed or strongly disagreed. The mode response was one (see Figure 9).

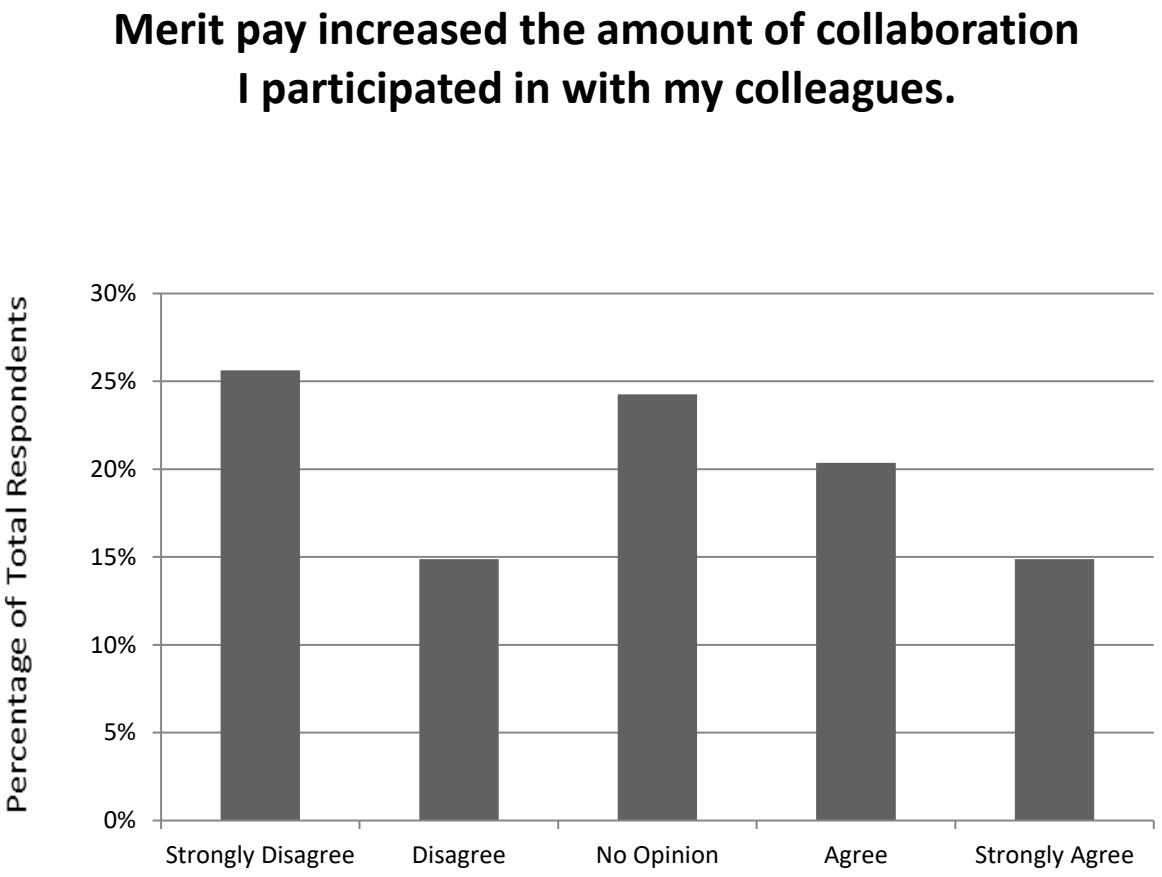


Figure 9. Survey query ten

Survey query number eleven. Barnett and Ritter (2013) outlined four critical elements necessary for merit pay program success. The first factor involves clear delineation and communication to participants of the structures and formulas necessary for monetary bonus rewards (Barnett & Ritter, 2013). Through this query, educators' understanding of merit pay program components in their districts as well as perceptions regarding the impact of those requirements on student success, were explored.

Respondents to query eleven had five possible response choices displayed on a Likert Scale. As shown below in Figure 9, the majority of respondents agreed or strongly agreed with this statement. Slightly more than one fourth of respondents disagreed or

strongly disagreed, with the remaining 21.69% selecting no opinion. The mode response was four (see Figure 10).

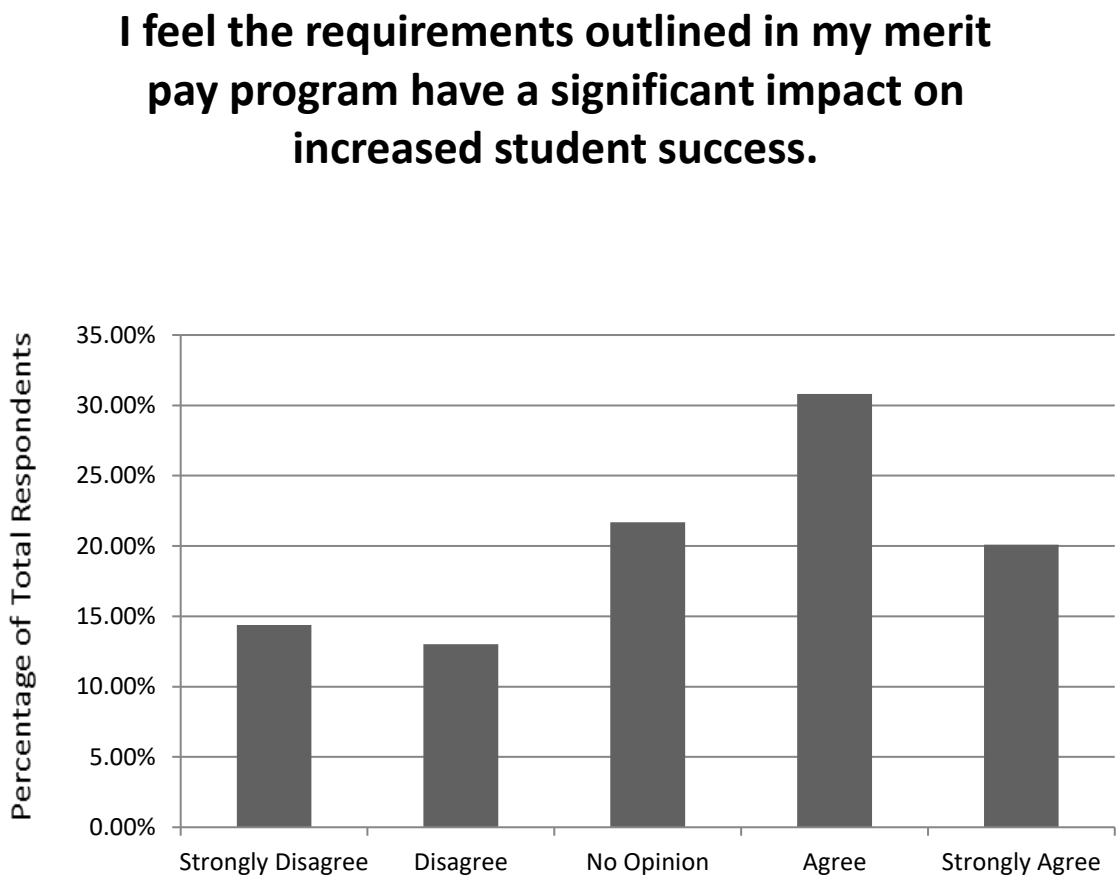


Figure 10. Survey query eleven

Survey query number twelve. Pay for performance programs for educators are based on the concept that monetary bonuses will positively affect educators' professional efforts, therefore positively affecting student academic growth and achievement (Bettinger, 2012). Callier (2010) believed typical teachers are motivated primarily by intrinsic factors, with extrinsic factors such as monetary bonuses playing a less significant role. Odden & Kelley (2002) concluded educators' motivation can decrease when no awards or recognitions are provided. Survey query number twelve was utilized

to explore educator perceptions regarding merit pay programs' impact on teacher motivation.

Five possible response choices were displayed on a Likert Scale. The majority of respondents indicated performance pay positively impacted teacher motivation. Less than one fourth of participants' selections fell in the disagree to strongly disagree categories. The remaining 16.82% of all participants selected no opinion. The mode response was five (see Figure 11).

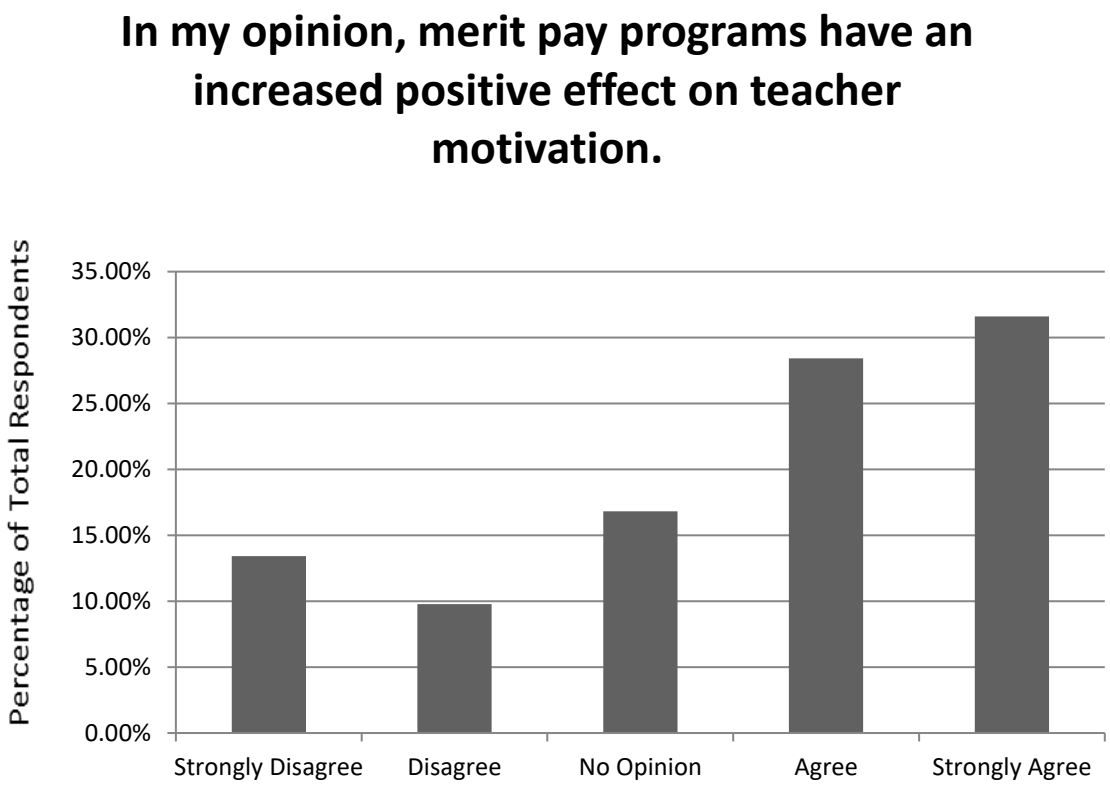


Figure 11. Survey query twelve

Survey query number thirteen. This query did not utilize documented evidence of merit pay success through secondary databases. This query explored educators' perceptions regarding merit pay programs' effect on student achievement. In query thirteen, there were five possible responses displayed on a Likert Scale. The mode

response for this statement was four. The majority of all participants responded in the agree or strongly agree categories. Less than one fourth of respondents fell in the disagree to strongly disagree categories. The remaining 22% selected no opinion (see Figure 12).

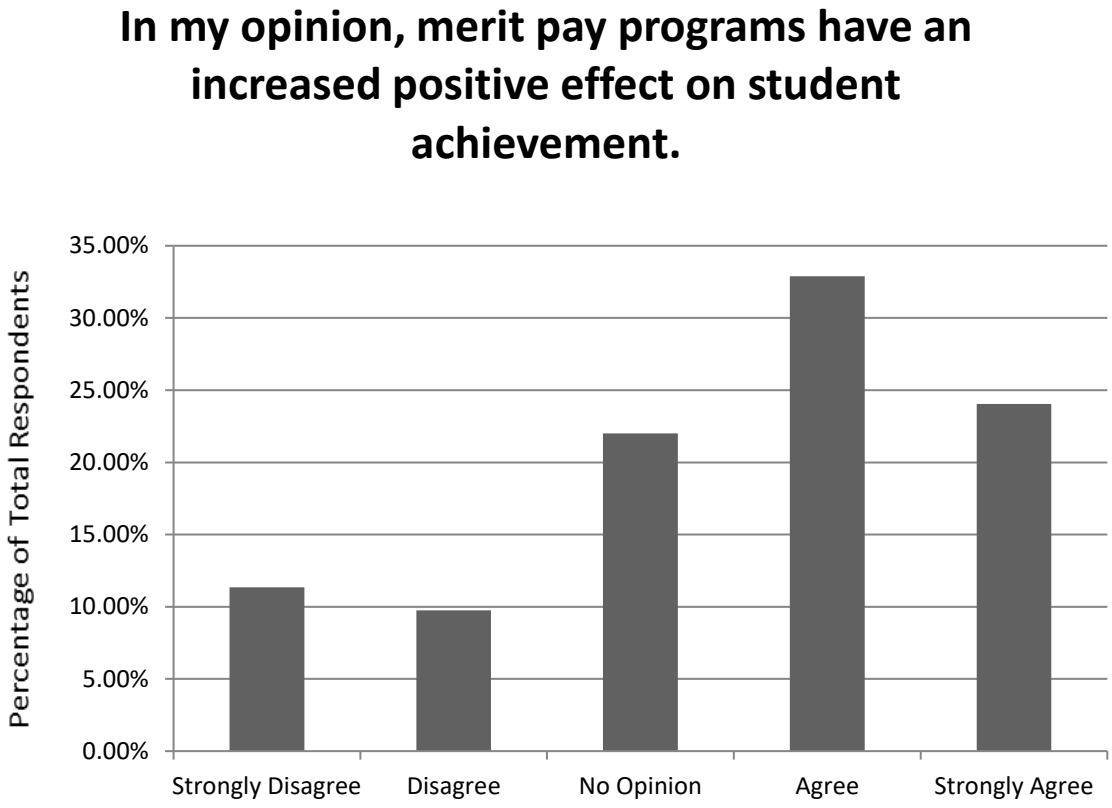


Figure 12. Survey query thirteen

Survey query number fourteen. Query fourteen was constructed as an open-response inquiry. Two hundred eighty-four individuals chose to answer the query. Five hundred fourteen survey participants elected to skip the query. Individual responses ranged from one word to multiple paragraphs. Data from query fourteen were examined and organized into a table, initially categorized by participant for comparison. The information was reviewed multiple times. Common response themes were noted and

tallied using a frequency chart. Information was then coded and grouped accordingly for further analysis. Five commonalities of response emerged. The first commonality was increased scholarly contact, such as before and after-school tutoring sessions. The second commonality involved student extension and enrichment activities. This included student clubs and special interest activities. Small group and one-on-one interactions also emerged as a component for significant impact. Building positive relationships between students and teachers were classified as noteworthy to student academic development by a modest number of educators surveyed. Several survey respondents indicated pay for performance structures had no impact on student growth and achievement.

Scholarly contact. The majority of respondents (56%) indicated their belief in increased scholarly contact such as before and after-school tutoring, as well as added instructional time, as a significant contributor to increased student academic achievement. Respondent 169 stated, "Tutoring time spent one on one with students is a requirement for our performance pay, and I feel that contributes to student success." Respondent 212 believed tutoring "gives them the opportunity to expand their knowledge." Respondent 269 reported, "Added time with some students has an impact. The added time strengthened student confidence and self-esteem." Respondent 34 stated:

> Students' attitudes and confidence seemed to increase because of the small environment provided by the clubs and tutoring. These students would have fallen through the cracks, but because of the time after school, they have a niche and feel they belong and are happier and more confident students at school. They also make friends during this time, which improves their outlook in their school life as well.

Student extension and enrichment activities. Of the total surveyed, 41% indicated student extension and enrichment activities such as after-school clubs, academic extension activities, and field trips and explorations provided substantial benefit to students. Survey participant 10 stated, "We should be offering experiences that broaden knowledge and learning." Participant 274 believed that "before and after school programs such as field trips, science fairs, spelling bee practices, and math contests, enhances what students learn in class." Respondent 64 stated, "The number of alternative activity programs spawned by our performance pay program was significant. The performance pay added incentive to promote diverse activities for students who normally would not be involved in after-hours activities." Participant 214 said, "Teachers can implement programs that go beyond the curriculum or can go more in depth for the students who want to participate."

Relationship building. The importance of building relationships between teachers and students was discussed in detail by 8% of educators surveyed. The significance of this component was stressed by Respondent 65 who stated:

> Time and attention to students! Kids are starving for attention and interaction from adults. What better way to meet their needs than before and after school programs? In return, the students learn subject matter, work ethic, and discipline. Win-win situation!

Respondent 236, "Extra time spent with students benefits them academically. It also fosters relationships between teachers and students that encourages the students to do their best on assessments." Respondent 244 stated:

> Students' attitudes and confidence seemed to increase because of the small environment provided by the clubs and tutoring. These students would have fallen through the cracks, but because of the time after school, they have a niche and feel like they belong and are happier and more confident students at school. They also make friends during this time which improves their outlook on their school life as well.

Small group/one-on-one interactions. Of those surveyed, 11% cited the strong positive significance of small group and one-on-one interactions with students. Respondent 20 stated, "Smaller groups are a definite plus. When the groups are too large, then it is hard to focus the content on the individual student needs." Participant 217 stated that with the better teacher to student ratio of small groups, "I can spend more time on those who need help." Furthering that thought, Respondent 180 said, "Before/after school tutoring ensures that students are getting one on one instruction and/or small group instruction on specific areas they need assistance in." Explaining the significance of small group interactions in detail, Respondent 213 stated:

> The merit pay impacts increased student achievement by giving a one on one or small group setting to those who don't understand a concept or skill. It also gives extra feedback or assistance to those students who need that extra encouragement or time.

No impact. Nearly 25% of respondents reported pay for performance requirements had no effect on their efforts to successfully educate students, and therefore no significant impact to student academic growth. These educators stated their

professional efforts for students would not decrease if performance pay compensations were eliminated. Respondent 61 stated:

> I am not a fan of merit pay for several reasons. First, I use the same methods and have same motivation for teaching at schools that did not offer merit pay. Secondly, there are some areas where students' motivation and learning are not tested, i.e. music performance classes. If the merit pay is not based on test scores, it might be successful for teachers who are younger or burned out, but I witnessed several teachers just giving the students the test to learn the answers so that they would score well and consequently the teacher would earn merit pay. Has to be a better system of actually rating student achievement!

Supporting this idea, Respondent 10 said:

> I would rather see merit pay added to the salary outright rather than dangling the carrot out there–to see how far and how often we jump for the money – which keeps decreasing. Let us just look at what happened in Atlanta–with its "award winning schools" and the bonuses for their "outstanding job." If our salaries are based on merit pay, watch out.

Participant 135 said, "Most teachers are doing these programs because they are teachers. Now we just get paid for doing these things!" "I'd be doing exactly what I'm doing anyway, but for what it's worth, I appreciate the pay–which I end up spending on my students," said Respondent 4. Respondent 14 believed, "The teachers that are trying their hardest to help students will do so regardless of their merit pay." "Pay doesn't have anything to do with it. It's the dedication of the teacher to make connections," said Respondent 147. Participant 43 stated:

I do not feel that any of the components of performance pay had a significant impact on increased student achievement. The main determining factor in increased student achievement is the personal motivation and disposition of the individual and collective group of teachers and leaders (see Figure 13).

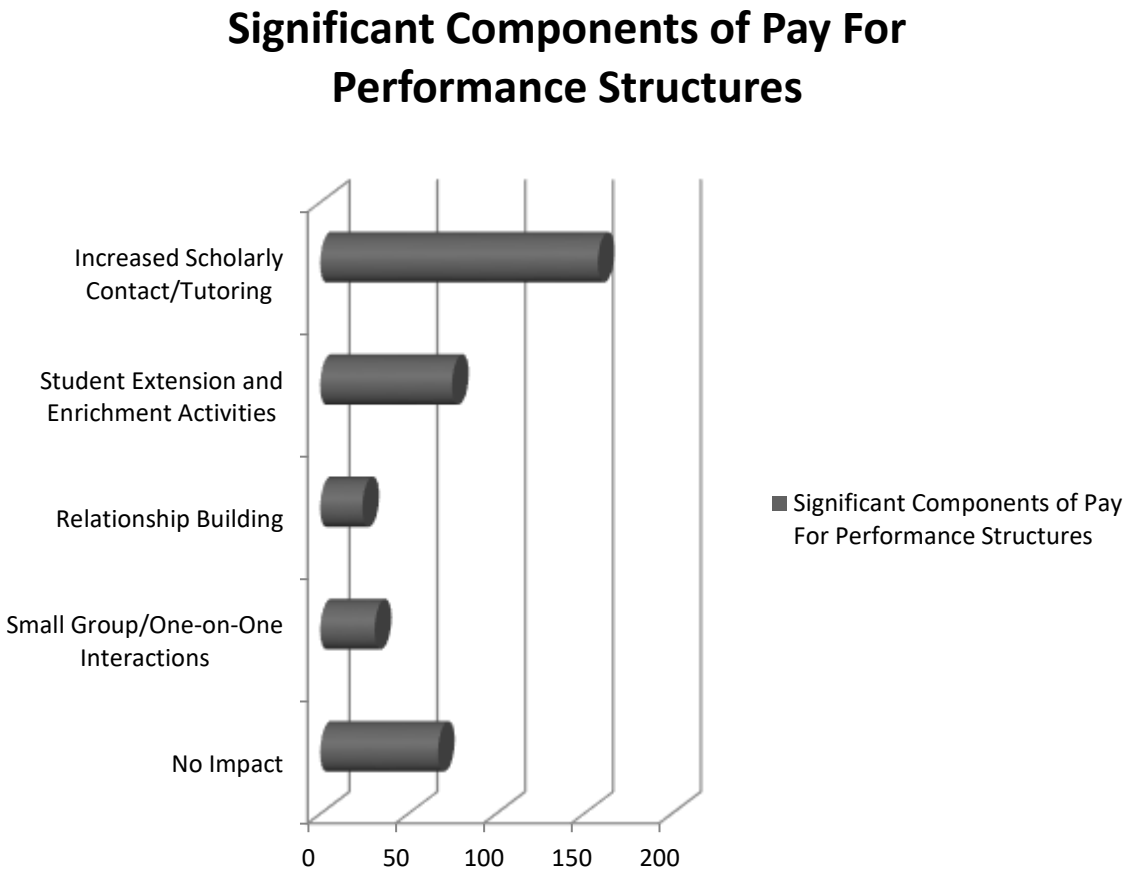


Figure 13. Survey query fourteen

Phase 2: Interview data. Interview data for teachers and administrators were reviewed numerous times. The transcribed information was examined carefully. The raw data were separated into two categories: teachers and administrators. This information was then grouped by question into separate tables for careful analysis. This

strategy permitted easy cross-examination and comparison of question responses. Significant repetitive words and patterns in responses were noted and coded in each category.

Teachers. All of the teachers interviewed were employed at the elementary level in public schools with merit pay experience. Interviewed teachers were asked to describe various types of requirement options they could fulfill in order to receive merit pay compensation. Each respondent indicated bonus compensations were directly tied to students' academic achievement test scores: "The program we did was based off students' test scores, so that was basically it," stated T1. T2 commented, "They (students) took a test at the beginning of the school year and the same standardized test at the end of the school year and then the growth was done at that period of time."

Interviewees were encouraged to discuss their opinions of merit pay in general. No specific guidelines were given to evoke richer and more revealing response. "I think there needs to be more components besides just students' test scores," stated T1. All interviewees agreed that test scores do not provide a fair indicator of all teacher efforts and successes toward student academic growth.

Organization and structure of the program was also presented as an important factor of positive attitude. Teachers felt strongly that test data utilized for performance pay ratings should be acquired at the beginning and end of the same school year to increase the reliability of measurement regarding teacher contribution to student growth. T2 stated,

> Well, it was a private institute that started it. The way they did it was very well organized. It was a standardized test given at the beginning and the

> end of the year. It did, I think, build some morale thinking that, you know, they had something to gain from the growth of students. However, I do think that our teachers would work on that regardless. They had everything structured and they had the percentage model even provided for teachers in writing so that they would know if your students grew by this percent over the period of time this was what the possibility (compensation) was.

Educators strongly believed their contributions were best measured when assessments occurred at the beginning and end of the academic year.

Interviewed teachers were asked to discuss a time when they believed they had a significant impact on students due to increased efforts on their part that could be considered over and above their job description. Respondents were encouraged to examine and discuss their motivation for their extra efforts. Teachers deliberated the benefits and rewards of added contact time with students when needed. Teacher collaboration and teamwork were also reported as primary motivators of individual's increased efforts. T2 described the significance of after school programs developed collaboratively with other educators. "It helped to talk about different methods that we've done in the school year that have been successful and that (success) carried over into the after school program," said T2. T3 highlighted her successes with a specific student who has struggled with behavioral issues in past years. Explaining how a more structured environment, added student-teacher interaction time, and after school contact time with parents have caused a tremendous improvement in this student's behavior and attitude toward school, T3 stated, "When you see those results as quickly as that, it motivates you to continue to do the same thing. He's come so far. I'm so proud of him."

Teachers were questioned regarding performance pay opportunities' effect on teacher collaboration within their school. Interviewees discussed the fact that poorly structured programs could cause competition and decrease collaboration. They emphasized the importance of basing bonus compensations on growth rather than comparisons among teachers. Two interviewees believed merit pay, structured this way, had no effect at all on teacher collaboration, while the third respondent stated it had a positive effect. T2 stated:

> I think it was a positive thing. I do. They were all working for a common goal. It wasn't like someone was trying to outdo another person because it was all based on your personal classroom. I felt like that was probably the best scenario.

The next question posed to teachers was, "Do you feel the merit pay system is easy to administer fairly?" Each respondent indicated the significant importance of fair administration, and each indicated they believed that their school's system of merit pay was not structured fairly for all stakeholders. T1 said, "It could be, but you would just have to set up the right guidelines." Respondents did not elaborate on what guidelines would be fair, stating it would be difficult to structure the rewards in a performance pay program fairly to all team members.

Would you recommend a merit pay system for all public schools? Two teachers responded to this question negatively, believing performance pay can ultimately be detrimental if structured improperly. Teachers who are intrinsically motivated may realign their practices to focus on monetary bonuses rather than true student need. T2 said:

> No, because I think it motivates teachers in the wrong way. We don't get into this business for the money. We do it because we love those light bulb moments, those ah ha, oh my gosh they get it, look at what they did that they couldn't do six months ago moments. Unfortunately, merit pay is based on test scores and things that cannot be measured the way they need to be measured per child as opposed to per classroom.

Measuring teacher contribution fairly is arbitrary and therefore difficult to assess fairly. T1 stated, "If they were just going to base it on test scores, then I would say no. But, if it were test scores, teacher observation, other things I would be more on board." The importance of solid program structures is significant to all stakeholders. Good communication to all involved builds better buy-in by team members. Without this solid basis, teachers are less likely to support the performance pay opportunity. T2 reported:

> I would if it were run the way it was initially with us. It was an outer source doing it, and it was standardized, and it was well structured. They used the same exam at the beginning and the end so you could see a true growth pattern.

When asked what changes would occur in their classrooms if the potential for performance pay bonus compensations were removed, two educators stated that nothing would change. Without elaboration, T1 simply replied emphatically, "Nothing! Nothing!" T2 said, "I don't know that a lot of things in the classroom actually changed, because we have a lot of good, really strong teachers in our building. They care about the students." Teachers believe that strong educators are intrinsically motivated and therefore unchanged by bonus compensations. They did state that weak teachers were more likely to increase their efforts when monetary rewards were at stake.

T3 had an interestingly different perspective, indicating her professional efforts toward meeting individual student's academic needs would actually improve if merit pay and academic achievement test ratings were removed. Curriculum would broaden and provide richer, more valuable educational experiences. "I wouldn't have bothered devoting so much time on it, teaching to the test as much. Ninety percent of what we had to do in kindergarten was teach them how to do a test more so than teaching them basic fundamentals. How to fill in your test sheet, here's how we bubble in a circle, stuff like that. Days were spent for that instead of actual content," stated T3.

Interviewees were asked to describe factors in their merit pay system they felt contributed most to increases in student achievement. No significant components were discussed, with all respondents in agreement that little affect was achieved. "I don't think it had an impact," stated T1, "I think I did the same things. I mean, I wasn't going to change because there was money tied to it, so whatever I'm doing I'm going to continue to do that regardless." T3 negated the question by discrediting the system of evaluation utilized for their school's performance pay plan stating, "If you could measure the students based on their actual achievement and not on test scores [*sic*] As it is now, I don't think it's a legitimate way to measure anything."

T2 discussed the significance of increased teacher morale encouraged by compensatory rewards. T3 stated:

> Probably just building the morale and it's, you know, that additional clap on the back for the teachers that work really hard. This is a way to acknowledge those that really do put forth a lot more of an effort and value them more.

Administrators. Administrators interviewed were all principals of elementary schools where performance pay programs had been implemented. Each administrator was invited to discuss his/her opinions of merit pay. None of the interviewed principals mentioned any effects on improved student achievement. All three respondents mentioned the benefits of teacher motivation, stating educators deserve recognition and reward for their ongoing contributions to students. P1 and P2 discussed the positive motivation bonus compensations could produce for classroom teachers. P2 said, "I think it's (merit pay) motivating for teachers." P1 stated, "I think people should be compensated for the work they do and rewarded and recognized when they have done something outstanding."

P3 also discussed pay for performance structures' effects on teacher motivations, expressing concern over possible detrimental consequences. P3's concern was based on the demographics of the school where he is principal. High populations of at-risk students are present at his school, providing automatic challenges to educators trying to meet standardized testing goals. P3 stated:

> I was real concerned about what kind of data would be used for it, because I know working in a high needs school with low test scores and all that, you know, the teachers work really hard and don't always get the results that they might want.

Respondents were asked to describe various types of requirements educators must fulfill in order to receive performance pay bonuses in their schools. The dominant response from all three contributors involved standardized achievement test scores. Administrators discussed the importance of focusing on accurately measured student

growth. P2 stated, “Ours was solely based on growth from the students.” P2 also reiterated the importance of measuring growth from fall to spring, so that all stakeholders know the bonuses were measured on their contributions to student achievement that year. P2 further stated, “I just know when we used a pre- and post-test we were able to measure growth for that year. If you really want to see how much your kids grow, that’s the best way to do it.” Educators stressed the importance of measuring all types of student growth, not only gains reflected on achievement test data. P3 elaborated further,

> I think you would have to use (standardized testing) data, but I think that just showing that somebody being able to get to a certain level might not be as appropriate as the growth of a particular child or classroom.

P1 briefly discussed other important factors such as outstanding practices and declared:

> When a teacher goes far and beyond the call of duty for their job [*sic*] let’s say a teacher who not only had outstanding test scores but also supports that child by doing home visits, supporting the child’s dance recital, or other recital, or games, activities the child is involved in outside the school [*sic*] when the teacher goes because she knows in her heart that she wants to be a part of that child’s life and have a better understanding of how and why that child works as they do, that makes a big difference.

Teachers and administrators felt strongly that all aspects of educator contribution and growth cannot be measured by standardized testing. Student test scores improve when students’ deportment and internal strengths and motivations are strengthened through teachers interactions and modeling. However, many efforts by teachers to

improve students' attitudes, self-concepts, confidences, self-motivation, and other critical life skills are not directly assessed through academic measurement.

Opinions regarding which stakeholders should receive performance pay compensations were also queried of interviewed principals. All three administrators confirmed their beliefs that all faculty and staff should be eligible for bonus compensations in performance pay structures, with each discussing the significance of all team members toward desired goals. For example, during the first year of the performance pay program, cafeteria workers stopped eating in the kitchen and instead ate with students, working to encourage them to study and grow. Custodians would work weekends voluntarily, without additional compensation, to be certain school grounds were properly cared for and ready for students. All stakeholders were unified in their desire to positively affect student academic achievement and a community of teamwork was established.

Each respondent also acknowledged the difficulties this decision presented, as fair levels of bonus compensations are difficult to establish for all stakeholders. Rewarding individuals for their contributions to each student's growth and success is arbitrary regardless of established structures. P2 said, "Paraprofessionals, they, a lot of times go far and beyond the call of duty by working in the classroom or taking on a child, working with a child." P1 stated, "Other people, I feel, should be participatory for merit pay goals to a certain extent, but I think that is a very fine line." P3 said, "I think to make it fair it must be made available to more than just the classroom teachers, you know, but that makes it very difficult to find a way to use data to judge that." P3 further stated, "One reason they did that is they felt like it would motivate the entire staff to, you know,

perform better, take more of an interest in the kids and what they were doing. Everybody was compensated for growth, including the principal."

Principals were then questioned about their beliefs regarding core motivations for most professional educators. "I don't think it's the money!" stated P2. Each administrator firmly indicated that caring about kids and wanting to make a difference serves as a primary motivator for almost every strong and effective educator. The administrators believed monetary compensation is not typically a dominant driving force in professional educators. P2 said, "I don't think anybody nationwide gets into education necessarily for pay." P1 stated:

> The core motivation, I would hope, and I look for this when I am looking for teachers, is one that really cares about kids. When I look for a good teacher, I look for someone who really cares about kids and cares about their progress.

Administrators were asked to describe how pay for performance requirements affected teacher collaboration in their schools. All three emphasized the fact that solid merit pay structures could strengthen collaboration among professional educators. "It could cause them to collaborate and work closer together," said P1. Describing the initial implementation year of pay for performance in his school, P1 stated "I think teachers did work together more. I think people worked together more, spent more time, spent time planning and things like that." Administrators P1 and P3 also discussed the possibility that improperly structured programs could have a negative effect on teacher collaboration. "It could cause them to, I think, to become jealous and envious too, and that would be the downfall of it," stated P1. P2 elaborated further stating, "I think if it

was set up where maybe, I don't know, maybe where some teachers would get that and other teachers wouldn't, I think it would hurt collaboration for sure."

All participants were in strong agreement regarding the ease of fair administration of performance pay requirements and compensatory rewards. Each administrator stated that fair administration to all stakeholders was not an easy task. P2 stated, "I think no matter how you do it, somebody's probably going to complain somewhere." P3 said simply, "I think it's very difficult." P1 said:

> I feel that is the reason a lot of school districts are not doing merit pay. It's because it cannot be done in a fair and consistent way! It causes too many hard feelings, too much trouble, too many headaches. We need to focus on children and helping children to succeed. Merit pay can really take us away from our focus.

When asked whether or not they would recommend a merit pay system for all public schools, two administrators responded negatively: "I would love to, but based on what I have seen, the problems it causes, and taking our focus from where it needs to be I am going to say no," stated P1. P3 discussed the difficulties surrounding schools serving students from different backgrounds, socioeconomic levels, and ability levels. Fair comparison between different schools can prove extremely challenging.

The remaining administrator (P2) responded affirmatively, delineating the qualifiers necessary to validate his choice. P2 stated:

> One thing I liked about what we did is that everybody stood a chance to benefit, and I really think that in a school you're trying to build a sense of community. In a school everybody has a chance to impact the child.

P2 continued, “I think it is critical to have a pretest and a posttest. We were able to measure growth for that year. If you really want to see how much your kids grow, that’s the best way to do it.”

Administrators were then asked to discuss what changes significantly impacting student success would occur if performance pay compensations were removed. Two principals, P1 and P2 believed no significant changes would occur. P1 stated:

> I feel that committed ones would continue doing what they’re doing, what they need to do to make a difference in the life of child. It’s an intrinsic feeling for doing what you know is right for kids.

In contrast, P1 and P3 also discussed negative feelings among staff that might develop if compensations were removed: “I feel if it were, um, taken away people would, um, be resentful and jealous and angry, bitter,” said P1. “I think it would negatively affect, uh, if it was taken away. It would be bad for morale and therefore bad for test scores,” said P3.

When questioned regarding critical components necessary for performance pay compensation most contributory to increases in student achievement, interviewed administrators agreed measurement of student growth is vital. Each expounded the statement, however, explaining that fair measurement of student growth is of utmost importance to success. What factor is most critical to utilize for compensation? “Academic growth among students, uh, not so much test scores, but growth. Academic growth is what we want to see, moving in the right direction. Sometimes you have to look at all the factors involving a child,” stated P1.

Phase 3: Secondary databases. Achievement test data and student growth trends were also examined, creating a triangulation of data when combined with qualitative information collected through surveys and interviews. A unique merit pay program was piloted in one Arkansas school district. The program initiated in one of the district's elementary schools, spreading to additional schools in subsequent years. The goal of this experimental pilot program was to improve education practices and to create a model for replication throughout the country. During the first two years of the Arkansas school district's pay for performance pilot program, a private foundation structured, managed, and funded the program. Independently contracted standardized testing instruments were utilized as an indicator for merit pay compensation awards in the performance pay pilot program. Students were given a pre-test in August and a post-test the following May. Measured growth was significant in all areas tested, including math, language, and reading. Students moved from the 18th percentile on the independently contracted August test to the 30th percentile on the May test. (Barnett & Ritter, 2013).

As the pilot program expanded to include additional campuses, initial growth within each school continued to be favorable in the areas of math, language, and reading. Sufficient data do not exist to measure sustained gains over time, as the privately funded pilot program ended after two years. The final campuses added were only a part of the merit pay pilot program for one academic year (Buck & Greene, 2011). At the completion of the privately funded performance pay study, the school district assumed control over the pay for performance model, and subsequently many changes to the structure occurred.

State standardized test data were scrutinized for comparison to assess the validity of the independently contracted test results. In the independently funded measurement, students in each grade level were tested in all subject areas using the Stanford-10 Form A Complete Battery both in the fall and in the spring of the same school year. Scores were then calculated using national normal curve equivalents (NCE). Based on the NCE, students from grades K-5 achieved a 39.67% gain across the board in all subjects during the first year. Fourth grade students participating in the pilot program showed a 28.86% increase in literacy scores and a 48.62% increase in mathematics. The impressive gains recorded on the independently contracted tests directly tied to the merit pay pilot program were not supported by the required state standardized testing instrument. As illustrated in table one, state achievement test scores did not consistently increase. Only scores from the fourth grade classes state testing are displayed, as not all grade levels were given the state standardized test annually. With limited data, there is no clear explanation of the lack of consistency between the two testing instruments (see Table 1).

Table 1

Percentage of 4th Grade Students Scoring Proficient or Advanced

School	Year before Merit Pay Implementation		Initial Year of Merit Pay Implementation		Two Years After Initial Implementation of Merit Pay	
	Math	Literacy	Math	Literacy	Math	Literacy
1	35%	47%	22%	24%	52%	44%
2	52%	32%	49%	43%	57%	33%

Summary

The purpose of this study was the identification of components of merit pay programs that significantly and durably provide positive impact to student growth and achievement. Existing and historic pay for performance programs were examined. The perceived successes of performance pay programs were also studied.

Administrators and teachers who had participated in merit pay programs were surveyed. Survey results were carefully analyzed to denote commonalities and themes. In addition, administrators and teachers were interviewed regarding their experiences with and perceptions of merit pay. These interviews were transcribed and examined for noted trends. Standardized academic test measurements were utilized to triangulate data.

In Chapter Five, research conclusions and recommendations are outlined. Key components of pay for performance programs were explained, including purpose driven structures, fair measurements of student growth, and empowerment of program participants. Further research was recommended to expand this study. Examination of

academic testing data over time, identification of significant teacher contributions not directly measured through standardized testing, and explorative research of merit pay program examples from a large demographic area could greatly advance the findings.

Chapter Five: Conclusions and Recommendations

U.S. public schools have traditionally utilized single-salary schedules, with professional salaries based on each educator's level of education and years of experience (Sawchuk, 2010). This structure allows average or low-performing teachers' salary compensations to be identical to their high-quality counterparts (Sawchuk, 2010). High quality educators consistently see greater success in students' academic achievement than their less effective colleagues (Sawchuk, 2010). Compensations based on the single-salary schedule can have a negative effect, lowering teacher motivation when no recognitions or bonuses are available for outstanding achievement (Odden & Kelley, 2002). Merit pay programs for educators are created to boost educator motivation and increase educators' contributions to students' success (Milanowski, 2002). When pay for performance plans are poorly structured, teacher motivations can be diminished and thus negatively impact student achievement gains (Gratz, 2009b).

The purpose of this study was to evaluate various performance pay programs utilized in public schools to isolate key elements that have produced positive growth in student achievement. Merit pay systems, structured as a means of increasing teacher contributions to students' academic growth, could be a valuable tool for districts endeavoring to improve students' academic standardized test scores. The Obama Administration's American Recovery and Reinvestment Act encouraged state and local education agencies to develop performance pay structures tied directly to student achievement (Whitehurst, 2010). The academic growth of students is highly significant to all stakeholders.

As discussed in Chapter Four, information was gained through surveys of educators from school districts in two states who had participated in various types of performance pay programs. This survey was sent via e-mail to 5,810 teachers and administrators in selected school districts. Survey recipients were selected using opportunistic sampling. This approach was employed to obtain the greatest number of possible responses from survey recipients. A total of 798 recipients completed the survey instrument. Teachers and administrators shared opinions and experiences through thirteen survey queries and one open response opportunity. Survey results were analyzed and coded to determine common themes and trends. Data from the surveys were organized into various graphic organizers to break down and study the information. From this information, results were summarized and recorded.

One performance pay school district was selected for closer examination, and interviews with administrators and teachers were conducted. This school was chosen specifically due to its involvement in an innovative, privately funded and privately managed test pilot performance pay program for educators. Interview questions were focused on educators' involvements with and opinions of merit pay program structures and perceived results. Through the survey instrument and qualitative interviews, added awareness of professional educators' experiences and opinions of merit pay were provided.

Academic standardized test data and other documented research information were obtained, scrutinized and considered while examining the success of utilized merit pay structures. Test scores were utilized as a method to measure performance pay program success. By reviewing test score data before, during and after performance pay program

implementation, student growth and achievement during program implementation was assessed.

The study design for this research was mixed, utilizing both qualitative and quantitative data. Survey research data were scrutinized to denote common themes and trends. Transcribed interviews and surveys' open response comments were carefully investigated, organized, coded and themed to allow reasonable interpretations and understanding of educators' opinions toward merit pay programs, including the positive and negative impacts of such programs, program shortcomings, program successes, and specific components desired for best structures and practices.

Summary of Findings

The purpose of this study was to explore and evaluate educators' experiences with pay for performance programs for educators in order to determine key elements of success in existing programs. Educator opinions, perceptions, and experiences were examined. Academic test scores were also utilized as a measurement of program success and sustainability. Three key questions provided a guide for research and exploration:

1. What key principles and components guide merit pay programs?

Key components emerged through the careful analysis of all acquired data. Identified fundamental elements were purpose driven program structure, fair measurement of student growth, and empowerment of program participants.

Purpose driven structure. Development and utilization of a solid, sustainable, and well-designed structure is critical to program success. Clear and consistent communication with all program stakeholders of performance pay structure requirements and bonus potentials is of utmost importance. T2 discussed the strength of the privately

funded program managed by an outside organization:

> They came in and, uh, they talked to the teachers about it, and the staff, prior to it occurring. They had everything structured and then they had the percentage model even provided for the teachers in writing so that they would know if your students grew by this percent over the period of time that this is what the possibility was… Later, the district kinda got involved and it changed quite a bit. It fell apart. They started out, you know, presenting it in a manner that it was gonna be the same percentage and all and it wasn't, and it just, it was kinda heartbreaking in way.

The performance pay program must be structured to build and nurture collaboration and collegial support. Partnership, support, and mentoring between teachers are critical components of public education (Solmon & Podgurksy, 2001). Positive teacher collaborations strengthen the school environment and affect greater academic student successes (Jackson et al., 2009). When asked to discuss performance pay's effect on collaboration, T3 said, "I think it was a positive thing. I do. They were, all working for a common goal."

When bonus compensations are based on performance ranked comparatively with peers, collaboration can be replaced with competition (Jackson et al., 2009). Damage to these important elements of the school community can occur if pay for performance breeds competition rather than common purpose. When this occurs, student academic growth and standardized achievement test results are negatively affected (Solmon & Podgursky, 2001). Survey respondent 252 said, "Teaching is a profession and not a

competition. All teachers should be supporting the increased achievement of students." P1 stated,

> Well, the downfall of it can be that it could cause them to become jealous and envious too, uh, and that would be the downfall of it. We don't need a school of division. That would tear up our efforts and PLC's and working together collaboratively. We'd all just fall apart.

Fair measurement of student growth. In each of the interview question responses, one or more participants discussed fair measurement of student growth. P1 stated, "…the problem comes in where it is not always fair and consistent." Student growth should not be measured only through standardized test scores, as significant positive growth can occur in many ways. P1 stated, "I think people should be compensated for the work they do and rewarded and recognized when they've done something outstanding. However, the problem comes in where it is not always fair and consistent."

All participants indicated a preference for utilizing an identical testing instrument during the fall and spring of the same academic year, as practiced by the independently funded merit pay program. T2 stated:

> They took it at the beginning of the school year and the same standardized test at the end of the school year and the growth was done at that period of time and the percentage of the growth was how they determined the amount we were given.

Both P2 and T2 discussed the disadvantage of using a comparison of standardized

tests administered only in the spring of each school year as an indicator of student growth, as opposed to testing students during the fall and spring of the same school year. P2 stated:

> I just know when we used our SAT-10, a pre- and post-test, we were able to measure growth for that year, um, when we did our other test, uh, giving it at the end of March or the first week of April, and you're doing the same test again, March or April, I don't know that you see the growth students actually have.

T2 said, in reference to the initial structure of her school's merit pay system requirements, when managed by a private company, "It was well structured and had the same exam at the beginning and then at the end so you could see a true growth pattern."

All significant teacher effort and contribution to student growth cannot be effectively measured through standardized testing. For example, American Society for Horticultural Science (2011) found that academic performance positively correlates with self-esteem. Teacher efforts to build students' self-esteem can have a profound effect on academic achievement and should be a component of merit pay compensation.

Survey respondent 236 believed that performance pay can motivate teachers to devote additional time to students, stating, "Extra time spent with students benefits them academically. It also fosters relationships between teachers and students that encourage the students to do their best on assessments." Respondent 8 agreed stating, "Student-teacher relationships were developed, which overall has a positive effect on student success." Survey participant 45 says, "Rewarding teachers for the extras they already do, but are not compensated for helps with motivation. I believe it indirectly impacts student growth, but maybe not achievement on state-mandated testing." Developing relationship

with students requires caring about the overall positive growth of the individual, not just academic standardized testing results. Many teachers invest time, patience, and caring into students beyond the requirements of the classroom. These efforts positively affect the self-esteem, confidence, and attitudes of the student and therefore affect academic growth and success. Bonus compensations should not be based solely on standardized test scores, but on a variety of factors designed to measure all significant teacher contributions and efforts. P1 stated:

> When a teacher goes far and beyond the call of duty for their job *sic* let's say a teacher who not only had outstanding test scores but also supports that child by doing home visits, supporting the child's dance recital, or other recital, or games, activities the child is involved in outside the school *sic* when the teacher goes because she knows in her heart that she wants to be a part of that child's life and have a better understanding of how and why that child works as they do, that makes a big difference.

Empowerment of program participants. Teacher autonomy is a determining factor to a successful school climate (Callier, 2010). Empowering teachers to make their own sound decisions and manage educational choices can provide powerful advances toward positive change (Dierking & Fox, 2013). Survey respondent 3 stated the component of performance pay that had the most significant impact on student achievement was, "…the ability to individualize in a way that fits students' unique needs." Respondent 26 agreed stating, "We had the liberty to plan, based on what our students needed, not on what the district said had to be done or what the latest education trend was." Survey participant 266 said, "The greatest impact came when teachers could

decide how to increase student achievement based on their own students' needs and not set by the district."

Consistently, all interview participants discussed their belief that strong teachers are intrinsically motivated to strive for student success. Cailler (2010) stated professional educators are typically inspired by factors such as helping students achieve success, being a role model, and helping to bring about positive change in students' lives. P1 stated:

> The core motivation, I would hope is one that really cares about kids. It's not about the money because we don't make a lot of money. You want to see that it is someone who really cares about children and about making the difference in the life of a child. When I look for a good teacher, I look for someone who really care about kids and cares about their progress.

Utilizing solid merit pay structures, the importance of teachers' intrinsic motivation will be recognized; assuring educators are not refocused to center professional efforts simply toward earning a monetary bonus. A substantial number of educators surveyed indicated merit pay had no significant impact on their increased professional efforts, but did provide appreciated acknowledgement of the work they had done and the student successes they had achieved. "I work extra to support the education of my students, not to earn more money. The money is a bonus that I gladly accept but does not motivate me to do more," stated respondent 28. Survey participant 230 said, "Getting paid extra was a bonus I'm grateful for but would have done if my students needed it." When asked to describe factors in your existing merit pay system you feel contributed most to increases in student achievement, T2 stated, "Probably just building the morale and that additional clap on the back for the teachers that work really hard. This is a way

to acknowledge those that really do put forth a lot more of an effort and value them more."

2. *What is the relationship between merit pay and student achievement?*

Three years of testing data was utilized to study merit pay program results. Student achievement scores were compared using the year before merit pay program implementation, during the pilot year of implementation, and two years after implementation. During the pilot year, two different testing instruments were used to assess students. Students were tested using the state mandated achievement test, as well as the Stanford-10 Form A. The Stanford-10 Form A assessment was privately funded by the performance pay program development team. Significant gains were shown during the initial year of implementation using the Stanford-10 Form A assessment taken at the beginning and end of the academic year. These gains were not supported by the state mandated testing instrument during the pilot year, where student scores actually showed a decrease overall from the previous year. In contrast, scores taken two years after program implementation showed significant gains in state testing scores. The relationship between merit pay and student achievement could not be clearly established.

3. *What are the perceived effects of merit pay?*

Educators' responses presented mixed ideas related to this question. Survey results from question three strongly indicated educators' believed merit pay programs increased their effectiveness as educators, with nearly half of all educators surveyed responding affirmatively. Respondent 57 said, "I think that Merit Pay is a nice incentive for the extra work required." Through question seven responses, nearly half of all educators surveyed strongly stated that performance pay structures increased their

internal motivation as an educator. Participant 25 stated, "It is nice to have incentive and reward for giving." Respondent 25 said, "I was more motivated to have kids stay after school for help. And the help increased their assessment performance."

However, question nine provided a different viewpoint, with over half of surveyed educators stating their efforts to educate and motivate students would not change if merit pay bonuses were removed. Respondent 89 stated, "On many levels, performance pay pays me for things I would do with or without the compensation." Respondent 284 said, "I would do my job the same way with or without merit pay." Respondent 82 declared, "Really performance pay has done nothing when you get down to it."

Implications for Effective Schools

Pay for performance structures for educators must be well-designed and clearly communicated to all stakeholders. Past programs experienced noteworthy successes when participants contributed to all steps of the design process (Jupp, 2005). Established best practices by educators, such as collaboration and collegiate support, must not be ignored but instead nurtured by program guidelines and requirements (Clabaugh, 2009). All participants should possess a clear understanding of program goals, expectations, and potential rewards.

Clear identification of effective teachers, as well as fair and consistent measurement of student growth and achievement is vitally important (Podgursky & Springer, 2007). All aspects of student growth should be considered. Basing bonus payouts on standardized test data alone can produce negative effects, causing harm to

desired outcomes (Wilms & Chapleau, 1999). Teacher dedication and involvement with students should also be valued components of contribution measurement.

Effective assessment of student growth and success is a consideration when structuring merit pay for educators (Gratz, 2009). Fair measurements for comparison emerged as significantly important to educators, particularly in regards to merit pay. Interviewees in this study strongly preferred test data that were taken at the beginning and end of the same school year, thus showing a clear measurement of growth achieved during one academic year. Administration of standardized testing to students twice a year may or may not be cost-effective or time-effective for school districts. With state testing requirements, districts may not want to add additional testing to already busy learning schedules. Finding an efficient instrument of measurement for comparison that is considered fair by the majority of stakeholders would require greater research.

Financial rewards alone do not provide successful motivations for professional educators (Callier, 2010). Teacher empowerment should be developed and encouraged. Performance pay program requirements regarding teacher contributions to student success should be solidly yet broadly structured to allow flexible implementation by educators. The requirements should allow and encourage teachers to tailor efforts to fit individual student needs. Teacher autonomy, within specified guidelines, boosts teacher motivation and student growth and success. Schools should look at varied and effective ways to effectively monitor and motivate the educational team's effective practices.

Additional research should be conducted to further this study. Delving deeper into the intrinsic and extrinsic motivators increasing teachers' efforts is suggested. It would be valuable to research and field test various motivators with teacher and staff in a

school setting over time. An examination of different testing instruments to identify an affordable, time-efficient tool of measurement to provide a true indicator of student achievement would be needed and highly valuable.

Recommendations for Future Research

Further research is recommended to expand this study. Examination of testing data over time during any pay for performance program implementation is recommended. As suggested by research participants, identification of teacher contributions to student growth and achievement not directly related to student academic test scores could be studied and an efficient measurement procedure developed to effectively consider these contributions. Additionally, it is suggested that the territory of the study be expanded through future research to include a broader demographic, thereby increasing the depth of the information gleaned.

Summary

The purpose of this study was the evaluation of experiences, perceptions and results regarding pay for performance programs for educators to determine key components for effective program implementation, educator perceptions toward merit pay structures, and the relationship between merit pay and student achievement success. Results of this study show that merit pay can produce an increase in student achievement scores. The sustainability of the effectiveness of merit pay, however, was not documented. Many programs were abandoned only a few years after initial implementation. Other programs routinely underwent substantial changes to program design, essentially beginning new programs with each restructure event.

Purpose driven structure for merit pay programs, fair measurement of student growth and achievement, and the importance of teacher empowerment in program design emerged as significant components for student success. Purpose driven structure signified the importance of program development and design. Fair measurement of student growth illustrated teachers' strong belief that effective comparative measurements of student growth should be taken at the beginning and ending of the academic year using identical measurement tools. Teacher empowerment encompassed the importance of involving teachers in all steps of the development, implementation, and revision process. Further investigation of each of these components to expand these results is recommended.

Through this study, much was learned about the history of merit pay, the possible benefits for students, and common difficulties for stakeholders. The issues of sustainability and fair implementation of performance pay are challenging. If solutions are devised that provide long-term sustainability and fair evaluation methods, merit pay for educators could become an effective component of student academic growth and success.

References

Aguilar, E., (2011, June 22). Measuring a teacher's effectiveness goes beyond test scores. *Edutopia*. Retrieved from http://www.edutopia.org/blog/teacher-effectiveness-measuring-test-scores-elena-aguilar

American Society for Horticultural Science. (2011, April 4). Student confidence correlated with academic performance, horticultural science class study finds. *ScienceDaily*. Retrieved from www.sciencedaily.com/releases/2011/04/110404105901.htm

Arkansas Department of Education. (2014). Public *school report cards.* Retrieved from https://adesrc.arkansas.gov/

Bainbridge, C. (2010). *Extrinsic motivation* Retrieved from http://giftedkids.about.com/od/glossary/g/extrinsic.htm

Barnett, J., &. Ritter, G. (2013). *A straightforward guide to teacher merit pay: Encouraging and rewarding schoolwide improvement*. Thousand Oaks, CA: Corwin.

Berger, B. (2013, April 11). Don't teach to the test. *U.S. News & World Report*. Retrieved from http://www.usnews.com/opinion/articles/2013/04/11/why-excessive-standardized-testing-is-causing-american-schools-to-fail

Bettinger, E., (2012, August). Paying to learn: The effect of financial incentives on elementary school test scores. *MIT Press Journal, 94*(3), 686-698.

Blinder, A. (2015, April 1). Atlanta educators convicted in school cheating scandal. *The New York Times.* Retrieved from http://www.nytimes.com

Blume, H. (2011, November 7). Focus on standardized tests may be pushing some teachers to cheat. *Los Angeles Times*.

Booker, K., & Glazerman, S., (2009, May 29). *Does the Missouri teacher career ladder program raise student achievement?* **(**ERIC Number: ED507469**)** Princeton, NJ: Mathematica Policy Research.

Booker, K., & Glazerman, S. (2011, April 20). Effects of the Missouri career ladder program on teacher mobility. *Mathematica Policy Research, Inc*. Retrieved from http://www.researchgate.net/publication/234638870_Effects_of_the_Missouri_Career_ Ladder Program_on_Teacher_Mobility

Buck, S., & Greene, J. (2011, February 24). In the United States, merit pay plans for teachers are few and far between. *Education Next*. Retrieved from http://educationnext.org/in-the-united-states-merit-pay-plans-for-teachers-are-few-and-far-between/

Burns, A., & Gardner, B. (2010). Reforming teacher pay. *School Administrator*, *67*, 15 - 20.

Butrymowicz, S., & Isensee, L. (2009, September 30). Miami-Dade schools debut merit pay in Florida. *Miami Herald.* Retrieved from http://www.miamiherald.com

By What Measure? Mapping and expanding the teacher effectiveness debate. (2012, Spring). *Harvard Educational Review*. Harvard Graduate School of Education. Cambridge, MA. Harvard Education Publishing Group.

Callier, J. (2010). Paying teachers according to student achievement: questions regarding pay-for-performance models in public education. *The Clearing House*.

Cameron, R. (2011). Mixed methods research: The five Ps framework. *The Electronic Journal of Business Research Methods, 9*(2), 96 – 108.

Cantrell, S., & Kane, T., (2013). *Ensuring fair and reliable measures of effective teaching culminating findings from the MET project's three-year study*. (Policy and Practice Brief). Seattle, WA. Bill and Melinda Gates Foundation. *83*, 58-61.

Chingos, M., Whitehurst, G., (2011, May 11) Class size: What research says and what it means for state policy. *Brookings*. Retrieved from http://www.brookings.edu/research/papers/2011/05/11-class-size-whitehurst-chingos

Clabaugh, G. (2009). Teacher merit pay: is it a good idea? *Educational Horizons*, *88*(1), 16-20.

Connell, C. (2010). *Merit pay study: Teacher bonuses don't raise student test scores.* [Web]. Retrieved from http://www.usatoday.com/news/education/2010-09-21-merit-pay_N.htm

Consortium for Policy Research and Education Policy Briefs. (2007, February). *Teacher performance pay: Research and guidelines for practice* (Brief No. 46). University of Pennsylvania: Heneman, H., Milanowski, A., & Kimball, S.

Creswell, J. W., Klassen, A. C., Plano-Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health.*

Darling-Hammond, L. (2010, October 19). *Evaluating teacher effectiveness: How teacher performance assessments can measure and improve teaching*. The Center for American Progress. Retrieved from http://www.americanprogress.org/issues/education/report/2010/10/19/8502/evaluating-teacher-effectiveness/

David, J. (2010, May). The key to changing the teaching profession: What research says about…using value-added measures to evaluate teachers. *Educational Leadership*, *67*(8), 81-82.

Dee, T., Keys, S., & Benjamin, J. (2005). Dollars and sense. *Education Next*, *5*(1), 60-63, 65-67.

Delisio, E. (2014, May). Pay for performance: What are the issues? *Education World*. Retrieved from http://www.educationworld.com/a_issues/issues/issues374a.shtml

Deubel, P. (2011, June 8). Measuring teacher effectiveness: Are we creating an education nightmare*? The Journal*. Retrieved from http://thejournal.com/articles/2011/06/08/measuring-teacher-effectiveness-are-we-creating-an-education-nightmare.aspx#fe5bM18QTAZeS7mP.99

Devarics, C. (2010). Congressional leaders vow bipartisan cooperation in revising k-12 law, while associations push changes they consider essential to minority-student success. *Higher Education*, *27*(3), 6.

Dierking, R., & Fox, R. (2013, March/April). Changing the way I teach: Building teacher knowledge, confidence, and autonomy. *Journal of Teacher Education*. *64*(2), 129-144.

Duncan, A. (2011, November 14-18). Create global awareness: Statement on international education week 2011. *The Center for Global Education*. Retrieved from http://globaled.us/now/fullstatementarneduncan.html

Duffy, F., (2011, June 16). Tables turned: Students to grade teachers. *Education Week Teacher*. Retrieved from http://blogs.edweek.org/teachers/teaching_now/2011/06/tables_turned_students_to_grade_teachers.html

Elias, M. (2009, January 22). The four keys to helping at-risk kids. *Edutopia*. Retrieved from http://www.edutopia.org/strategies-help-at-risk-students

Elliot, S., & Butrymowicz, S., (2013, July 1) Indiana's new education chief is changing the game on teacher evaluation. *The Hechinger Report*. Retrieved from http://hechingerreport.org/content/indianas-new-education-chief-is-changing-the-game-on-teacher-evaluation_12416/

Feinglas, L. (2009). *The impact of the Texas educators' excellence grant on eighth grade TAKS scores* (Doctoral dissertation). Retrieved from Texas A & M University database.

Flick, U. (2014). *An introduction to qualitative research* (5th ed.). Los Angeles, CA: SAGE.

Gill, B., Bruch, J., & Booker, K. (2013, September).*Using alternative student growth measures for evaluating teacher performance: What the literature says*. Washington, DC: U.S. Department of Education.

Glass, J. (2011). *The influence of teacher motivation in the context of performance-based compensation.* (Doctoral dissertation). Retrieved from http://scholarship.shu.edu/dissertations (1776)

Glazerman, S., & Silman, T. (2009). *Teachers bonuses for extra work: a profile of Missouri's career ladder program*. Retrieved from http://www.mathematica-mpr.com/publications/PDFs/education/MCL_program.pdf

Goldhaber, R., DeArmond, C., Player, S., & Hyung-Jai Choi, R. (2008). Why do so few public school districts use merit pay? *Journal of American Finance*, *33*, 262-289.

Goodman, S., & Turner, L., (2013, April). The design of teacher incentive pay and educational outcomes: Evidence from the New York City bonus program. *Journal of Labor Economics, 31*(2), 409-420.

Goodman, S., & Turner, L. (2011). Does whole-school performance pay improve student learning*? Education Next*, *11*(2), 66-71.

Government Printing Office. (1996, April 1). *Weekly compilation of presidential documents* (Vol. 32, no. 13, p. 573–581). Washington, DC.

Gratz, D. (2009a). Looming questions in performance pay. *Kappan*, *16*, 24-25.

Gratz, D. (2009). *The peril and promise of performance pay: Making education compensation work.* Lanham, MD Rowman & Littlefield Education.

Gratz, D. (2009b). The problem with performance pay. *Educational Leadership, 67*(3), 76-79.

Gregory, C., & Chapman, C., (2012). *Differentiated instructional strategies: One size doesn't fit all*. Thousand Oaks, CA: Corwin.

Hackshaw, A. (2015). Small studies: Strengths and limitations. *Official Scientific Journal of the ERS.* Retrieved from http://www.ersjournals.com

Hafenbrack, J. (2010, April 15). Gov. Crist vetoes controversial teacher merit-pay proposal. *Sun-Sentinel*. Retrieved from http://articles.sun-sentinel.com/

Hanna, J. (2011, June 1). The Elementary and Secondary Education Act: 40 years later. *The Harvard Graduate School of Education Magazine*. Retrieved from http://www.gse.harvard.edu/news/2005/0819_esea.html

Harrison, C., & Cohen-Vogel, L,. (2012). The politics of teacher reform in Florida: Analyzing causal narratives surrounding state adoption of performance-based evaluations, performance pay, and tenure elimination. *Peabody Journal of Education, 87*, 517-534.

Hemmingsen, J. (2014, March 31). Does performance pay motivate teachers? Let's ask Jason Glass. *The Gazette*. Retrieved from http://thegazette.com/2011/08/20/does-performance-pay-motivate-teachers-lets-ask-jason-glass/

Hendricks, M. D. (2011). *Pay and teacher selection: Do performance pay programs attract higher-ability teachers?* (Doctoral dissertation). Retrieved from University of Minnesota Digital Conservancy. (http://hdl.handle.net/11299/113056)

Jackson, C., Kirabo, B., & Bruegmann, E. (2009). Teaching students and teaching each other: the importance of peer learning for teachers. *American Economic Journal: Applied Economics I, 4*, 21-29

Jarvio, J. (2015, April 14). Eight Atlanta educators sentenced to prison in school cheating scandal. *Los Angeles Times*. Retrieved from https://www.latimes.com

Jupp, B. (2005). The uniform salary schedule. *Education Next, 5*(1), 10-12.

Karim, D., (2010). *Parental involvement in education*. Institute for Educational Development. Retrieved from http://ecommons.aku.edu/cgi/viewcontent.cgi?article=1024&context=pakistan_ied_pdcn

Kelley, J. (2013, June 3). Schools push merit pay for teachers. *Dayton Daily News*. Retrieved from http://www.*daytondailynews*.com/news/news/schools-push-merit-pay-for-teachers/nX8LF/

Kentucky Department of Education. (2013, July 31, 9:29a.m.). *Characteristics of highly effective teaching and learning (CHETL).* Curriculum Documents and Resources. Retrieved from http://education.ky.gov/curriculum/docs/pages/characteristics-of-highly-effective-teaching-and-learning-(chetl).aspx

Kershaw, S. (2000, April 10). Long history of turmoil entwines incentive pay plans for teachers. *The NewYork Times*. Retrieved from http://www.nytimes.com

Ladd, H., (2012). Teachers' perceptions of their working conditions: how predictive of planned and actual teacher movement?. *The American Educational Research Association*. doi: 10.3102/0162373711398128.

Livengood, C. (2010, April 15). Career ladder is back in business: Teachers will get paid for extra work, but future of program is still in doubt. *Springfield News-Leader*. Retrieved from http://archive.news-leader.com/article/20100415/NEWS04/4150361/Career-Ladder-back-business

Lohman, J. (2010, June 4). Comparing No Child LeftBbehind and race to the top. *OLR Research Report*. Retrieved from http://www.cga.ct.gov/2010/rpt/2010-R-0235.htm

Marshall, C., & Rossman, G. (2010). *Designing qualitative research*. Newbury Park, Calif.: Sage Publications.

Matus, R. (2011, July 18). Study: Teacher merit pay didn't work in New York City. *Tampa Bay Times.* Retrieved from http://www.tampabay.com

McCullers, J., & Bozeman, W. (2010). Principal self-efficacy: the effects of no child left behind and Florida school grades. *NASSP Bulletin, 94*(1), Retrieved from http://bul.sagepub.com/content/94/1/53.abstract doi: 10.11771019263651037 1976

Mertens, D. M. (2014). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods.* Thousand Oaks, CA: Sage Publications.

Milanowski, A. (2002). The varieties of knowledge and skill-based pay design: A comparison of seven new pay systems for K-12 teachers. *CPRE Research Report Series. National Institute on Educational Governance, Finance, Policymaking, and Management*.

Milkovich, G., Newman, J., & Gerhart, B. (2014) *Pay –or-performance plans. McGraw Hill Education Answers*. Retrieved from http://www.answers.mheducation.com/business/management

Miller, R., Hess, F., & Brown, C. (2012, March). Reauthorization of the elementary and secondary education act offers a new chance to improve education. *Center for American Progress.* Retrieved from https://www.americanprogress.org/issues/education/report/2012/03/06/11315/

Moran, M. (2010). Teacher performance pay alone does not raise student test scores. *Vanderbilt News* (September, 2010).

Morey, N. (2008). Connecting compensation and evaluation to build professional development. *Horace*, *24*(3), 12-13.

Morrison, N. (2013, November 26). Merit pay for teachers is only fair. *Forbes Magazine*. Retrieved from http://onforb.es/1iOTQMF

Moxley, E., & Lin, J. (2014, April 30). *Indiana schools say timeline to implement newly adopted standards is too tight*. Indiana Public Media. Retrieved from http://indianapublicmedia.org/stateimpact/2014/04/30/indiana-schools-timeline-implement-newly-adopted-standards-tight/#more-30146

A Nation at Risk: Where are we now? (2013, April 23). *Education Weekly.* Retrieved from http://www.edweek.org/ew/articles/2013/04/24/29nar_ep.h32.html

National Commission on Excellence in Education. (1983*). A nation at risk: The imperative for educational reform*. A Report to the Nation and to the Secretary of Education, United States Department of Education. Retrieved from http://datacenter.spps.org/uploads/SOTW_A_Nation_at_Risk_1983.pdf

NFL Public Forum Handbook. (2009, December). *Big sky debate*. *Resolved: That merit pay based on student achievement should be a significant component of K-12 teacher compensation in United States public schools*. Retrieved from bigskydebate.com

Niesse, M., & Rankin, B. (2014, February 21). Key figure pleads guilty in APS cheating scandal. *The Atlanta Journal-Constitution*. Retrieved from http://www.ajc.com/news/news/final-guilty-pleas-expected-in-atlanta-cheating-ca/ndXXZ/

Odden, A., & Kelley, C. (2002). *Paying teachers for what they know and do: New and smarter compensation strategies to improve schools.* Thousand Oaks, California. Corwin Press, Inc.

Park, S., & Sturman, M. C. (2012). *How and what you pay matters: The relative effectiveness of merit pay, bonuses, and long-term incentives on future job performance*. Retrieved from Cornell University, SHA School site: http://scholarship.sha.cornell.edu/articles/116

Pechthalt, J. (2007, November 9). No merit to merit pay. *United Teachers Los Angeles (UTLA), 37*(3). Retrieved from http://www.utla.net/node/930

Pink, D. (2009). *Drive: The surprising truth about what motivates us.* New York: Riverhead Books.

Podgursky, M., & Springer, M. (2007). Credentials versus performance review of the teacher performance pay research. *Education, 82*(4), 21-23.

Postal, L. (2014, April 23). Teacher merit-pay law: Federal judge rules part of teacher union lawsuit can proceed. *Orlando Sentinel*. Retrieved from http://www.orlandosentinel.com/features/blogs/school-zone/os-teacher-merit-pay-federal-lawsuit-florida,0,5331515.post

Ritter, G., & Jensen, N. (2010). The delicate task of developing an attractive merit pay plan for teachers. *Kappen, 91*(8), 32-37.

Roberson, R. (2013, September).Helping students find relevance. *American Psychological Association: Psychology Teacher Network*. Retrieved from http://www.apa.org/ed/precollege/ptn/2013/09/students-relevance.aspx

The Ronald Reagan Presidential Foundation & Library. (2010). *President Reagan's domestic policy: A more perfect union*. Simi Valley, CA. Retrieved from http://www.reaganfoundation.org/the-presidency.aspx

Rosales, J. (2014, May) Pay based on test scores? *NEA Today*. Retrieved from http://www.nea.org/home/36780.htm

Rose, M. (2010). Reform: to what end? *Educational Leadership, 67*(7), 6-11.

Sanders, T. (2011, March 24). Rick Scott signs teacher merit pay bill; critic calls it 'wrecking ball.' *The Florida Times-Union*. Retrieved from http://jacksonville.com/news/florida/2011-03-24/story/rick-scott-signs-teacher-merit-pay-bill-critic-calls-it-wrecking-ball

Sawchuk, S. (2010). Rules for revamping teachers' pay. *Education Week*, *29*, 19, 24.

Sawchuk, S. (2013, July 11). Teachers respond to Tennesssee pay plan. *Education Weekly*. Retrieved from http://blogs.edweek.org/edweek/teacherbeat/2013/07/teachers_respond_to_

tennessee_pay_plan.html

Severson, K. (2011, July 5). Systematic cheating Is found in Atlanta's school system. *New York Times*. Retrieved from http://www.nytimes.com

Simon, M. (2011). *Dissertation and scholarly research: Recipes for success.* (2011 ed.). Retrieved from http://www.dissertationsrecipe.com

Solis, V., Bannerjee, S., Tomko, G., & Baker, L. (2013, April 23). A nation at risk: Where are we now? *Education Week, 32*(29), 22.

Solmon, L. (2005). Recognizing differences. *Education Next, 5*(1) 16-20.

Solmon, L., and Podgursky, M. (2001) *The Pros and Cons of Performance-Based Compensation*, Milken. Family Foundation, Pasadena.

Spears, A. (2013, April 19). Teacher merit pay is on the way in tennessee. *Tennessee Education Report*. Retrieved from http://tnedreport.com/?p=242

Springer, M., Ballou, D., Hamilton, L., Vi-Nhuan, L., Lockwood, J., McCaffrey, D.,…Stecher, B. (2010). Experimental evidence from the project on incentives in teaching. *National Center on Performance Incentives at Vanderbilt University*. Retrieved from http://www.rand.org/content/dam/rand/pubs/reprints/2010/RAND_RP1416.pdf

Springer, M., Lewis, J., Podgursky, M., Ehler, M., Gronberg, T., Hamilton, L., . . .Peng, A. (2009, August). Texas educator excellence grant (TEEG) program: Year three evaluation report. *National Center on Performance Incentives.* Nashville, TN: Vanderbilt University.

Staiger, D. O., Gordon, R., & Kane, T.J. (2006, April). *Identifying effective teachers using performance on the job.* (Policy Brief No. 2006-01). Washington, DC. The Brookings Institute.

Strauss, V. (2011, February 6). Ronald Reagan's impact on education today. *The Washington Post*. Retrieved from http://voices.washingtonpost.com/answer-sheet/school-turnaroundsreform/how-ronald-reagan-affected-tod.html

Stutz, T., (2013, February 4). Judge rules Texas school finance system unconstitutional. The *Dallas Morning News*. Retrieved from http://trailblazersblog.dallasnews.com/2013/02/state-judge-rules-for-school-districts-in-school-finance-case.html/

Sutherland, K., McLeod, B., Conroy, M., & Cox, J. (2013). Measuring implementation of evidence-nased programs targeting young children at risk for emotional/behavioral disorders: Conceptual issues and recommendations. *Journal of Early Intervention, 35*(2), 129-149.

Tashakkori, A. & Teddlie, C (2010). *Sage handbook of mixed methods in social and behavioral research.* Thousand Oaks, CA: Sage Publications.

Toch, T. (2009). The perils of merit pay. *Kappan,* Retrieved from www.kappanmagazine.org.

Topor, D., Keane, S., Shelton, T., Calkins, S. (2011, January 12). *Parent involvement and student academic performance: A multiple mediational analysis*. National Institute of Health (NIH) Public Access Author Manuscript. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3020099/

Thomas, M. (2010). Let's try merit pay Tennessee's way. *Orlando Sentinel*. Retrieved

from http://articles.orlandosentinel.com/2010-04-21/news/os-mike-thomas-merit-pay-teachers-042210-20100421_1_merit-pay-plan-merit-pay-bill-standardized

United States Department of Education. (accessed 2014, May 14). *Elementary and Secondary School Act of 1965*. Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/pg107.html

United States Department of Education. (2004, March). *No Child Left Behind fact sheet*. Retrieved from http://www2.ed.gov/nclb/methods/teachers/hqtflexibility.pdf

Weibel, A., Rost, K., & Osterloh, M. (2010). Pay for performance in the public sector--benefits and (hidden) costs. *Journal of Public Administration Research and Theory*, *20*(2), 387-412. Retrieved from http://jpart.oxfordjournals.org/content/20/2/387.abstract

Weis, E. (2013, September 12). Mismatches in race to the top limit educational improvement. *Economic Policy Institute*. Retrieved from http://www.epi.org/publication/race-to-the-top-goals/

Weldon, T. (2011, October) Does merit pay for teachers have merit? Pros and cons of new models for teacher compensation. *The Council of State Governments Capitol Research*, pp 1-9.

West, M., (2013, January 10). Misunderstanding the Gates Foundation's measures of effective teaching project. *Education Next*. Retrieved from http://educationnext.org/misunderstanding-the-gates-foundation%E2%80%99s-measures-of-effective-teaching-project/

Whitehurst, G. (2010). Did congress authorize Race to the Top? *Education Week*, *29*(30), 24.

Wilms, W. W., Chapleau, R. R. (1999, November). The illusion of paying teachers for student Performance. *Education Week, 19*(10), 34-48.

Wisconsin Education Association Council. (2011, fall). *What do we know about merit pay?* (Issue Brief No. 20). Madison, WI: Author.

Appendix A

LINDENWOOD

LINDENWOOD UNIVERSITY ST. CHARLES, MISSOURI

DATE:	January 16, 2013
TO:	Lisa Carlon
FROM:	Lindenwood University Institutional Review Board
STUDY TITLE:	[405733-1] "Merit Pay for Educators: An Investigation of Components Significantly Impacting Student Achievement"
IRB REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	January 16, 2013
EXPIRATION DATE:	January 16, 2014
REVIEW TYPE:	Expedited Review

Thank you for your submission of New Project materials for this research project. Lindenwood University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

When writing up the results of the project, the reviewers of this protocol had the following suggestions:

The interview and survey questions do not seem to address Research Question #1: *What influences an individual or group to privately fund a school district merit pay program?* Perhaps eliminate?

Requests for opinions are the only data with respect to Research Question #3: What is the relationship between merit pay and student achievement?
Since there is no objective metric, could this not be combined with Research Question #4, which addresses perceived effects?

Also, please note that the application states a sample size and a population size that are identical, and both considerably larger than the estimated number of persons to be interviewed or surveyed.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the completion/amendment form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of January 16, 2014.

Please note that all research records must be retained for a minimum of three years.

If you have any questions, please contact Beth Kania-Gosche at (636) 949-4576 or bkania-gosche@lindenwood.edu. Please include your study title and reference number in all correspondence with this office.

If you have any questions, please send them to IRB@lindenwood.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Lindenwood University Institutional Review Board's records.

Appendix B

Introduction Letter for Superintendent

September 25, 2012

Dear Superintendent Dr. xxxxxxxxx,

I am conducting a research project entitled, *Merit Pay for Educators: An Investigation of Components Which Significantly Impact Student Achievement,* in partial fulfillment of the requirement for a doctoral degree in instructional leadership at Lindenwood University. The research gathered should assist in providing insights and perspectives into the specific components of merit pay programs that positively affect student achievement. By utilizing a mixed method approach of measuring both qualitative and quantitative data, various aspects of merit pay programs and how they affect student success will be explored.

I am seeking your permission, as the superintendent of the xxxxxxxxx School District, to conduct surveys and interviews as part of the data collection and analysis process. The surveys will be brief, taking approximately five to ten minutes. The interviews should last between twenty and thirty minutes.

Consent is voluntary, and you may withdraw from the study at any time without penalty. The identity of the participants, as well as the identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation (phone: xxx-xxx-xxxx or electronic mail: lgcarlon@gmail.com). You may also contact the dissertation advisor for this research study, Dr. Sherry DeVore (phone: xxx-xxx-xxxx or electronic mail: sdevore@xxx.xxx). A copy of this letter and your written consent should be retained by you for future reference. I greatly appreciate your help with this study.

Yours truly,

Lisa G. Carlon
Doctoral Candidate

Permission Letter

I, Dr. xxxxxxxxx, grant permission for Lisa Carlon to survey and interview faculty at xxxxxxxxx Schools as part of a research project entitled, *Merit Pay for Educators: An Investigation of Components Which Significantly Impact Student Achievement*. By signing this permission form, I understand that the following safeguards are in place to protect the participants:

1. I may withdraw my consent at any time without penalty.

2. The identity of the participants, as well as the identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

I have read the information above, and any questions that I have posed have been answered to my satisfaction. Permission, as explained, is granted.

_____ _____

Superintendent's Signature Date

_____ (your school)

Appendix C

Lindenwood University

School of Education
209 S. Kingshighway
St. Charles, Missouri 63301

Informed Consent for Participation in Research Activities

<Interview>

Merit Pay for Educators:
An Investigation of Components Which Significantly Impact Student Achievement

Principal Investigator: *Lisa Carlon*

Telephone: xxx-xxx-xxxx E-mail: lgcarlon@gmail.com

Participant_____ Contact info_____

1. You are invited to participate in a research study conducted by Lisa Carlon under the guidance of Dr. Patricia Conner. The purpose of this research is to identify specific components of merit pay programs that positively affect student achievement.

2. a) Your participation will involve completion of a brief interview regarding your participation in merit pay programs in your school district. The interview will be conducted by Lisa Carlon, and the information you provide will remain anonymous.

Unless otherwise requested, the interview will be conducted at your school of employment. Interview questions will be straightforward and simple.

b) The amount of time involved in your participation will be approximately thirty minutes.

Approximately 591 subjects will be involved in this research. This study will be conducted entirely in four schools with current or past experience with merit pay programs. All three schools will be surveyed regarding opinions and successes of merit pay. Three surveyed schools will be located in Missouri. One Arkansas school will be investigated to determine the approach used to structure merit pay and the successes or failures they have experienced. Two administrators and two classroom teachers will be interviewed from this district.

3. There are no anticipated risks associated with this research.
4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about merit pay program affects and may help to improve educational decisions and practices affecting student achievement.

5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Lisa Carlon at (Xxx) xxx-xxxx or the Supervising Faculty, Dr. Sherry DeVore at (xxx) xxx-xxxx. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs, at xxx-xxx-xxxx.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____	_____
Participant's Signature Date	Participant's Printed Name
_____	_____
Signature of Principal Investigator Date	Investigator Printed Name

Appendix D

Audio Release

During your participation in this research study, *Merit Pay for Educators: An Investigation of Components Significantly Impacting Student Achievement*, the interview session will be audio recorded.

Your signature on this document (Audio Release) gives the researcher permission to use the audio recording(s) for the purpose of this study. Confidentiality and anonymity are assured. These audio tapes will be destroyed at the completion of this project.

Your permission:

I give my permission for audio recordings produced in the study, *Merit Pay For Educators: An Investigation of Components Significantly Impacting Student Achievement*, to be used for the purpose listed above.

_____	_____
Participant's Signature Date	Investigator's Signature Date
_____	_____
Participant's Printed Name	Investigator's Printed Name

Appendix E

Interview Questions

Building Principals

1. Discuss your opinion of merit pay.

2. Describe various types of requirements your teachers fulfill in order to receive merit pay compensation.

3. Is merit pay offered to anyone in your school other than classroom teachers? If so, who? Please outline what requirements must be met in order for them to receive compensation.

4. What do you feel is the core motivation for most teachers? Explain.

5. Describe how you feel the merit pay program in your school has affected teacher collaboration.

6. Do you feel the merit pay system is easy to administer fairly? Elaborate.

7. Would you recommend a merit pay system for all public schools? Why or why not?

8. What changes (significantly impacting student success) do you feel would occur in your school if merit pay compensations were taken away?

9. What factors in your merit pay system do you feel contribute the most to increases in student achievement?

10. Do you have documented evidence of increases in student achievement as a result of merit pay? If so, please elaborate. If not, what evidence would be beneficial?

Teachers

1. Have you ever participated in a merit pay program at any school?

2. Describe various types of requirement options you could fulfill in order to receive merit pay compensation.

3. Discuss your opinion of merit pay.

4. Discuss a time when you believe you had a significant impact on students due to increased efforts on your part that could be considered over and above your job description. What was your main motivation for this extra effort?

5. How do you feel the merit pay program in your school has affected teacher collaboration?

6. Do you feel the merit pay system is easy to administer fairly? Explain.

7. Would you recommend a merit pay system for all public schools? Why or why not?

8. Discuss what changes would occur in your classroom if merit pay compensations were eliminated.

9. Describe what factors in your merit pay system you feel contribute the most to increases in student achievement.

Appendix F

Survey Queries

1. Does your school currently have a pay for performance in place?
2. Have you ever participated in a pay for performance program with any school?

Please stop at this point if you answer NO to question two.

Thank you for your participation.

3. I feel that performance pay has increased my effectiveness as an educator.
4. Have you implemented a before or after school program for students primarily to satisfy performance pay requirements?

If you answered NO to question four, please skip to question six.

Respond to the remaining questions using the following Likert Scale ratings:

1 – strongly disagree; 2 – disagree; 3 – no opinion; 4 – agree; 5 – strongly agree.

5. Students from all academic and socioeconomic levels participated in the before or after school program.
6. The performance pay program positively and consistently affected student achievement.
7. Performance increased my internal motivation as an educator.
8. Performance pay caused me to increase my external efforts as an educator resulting in noticeable gains in student achievement.
9. My efforts to educate and motivate my students would decrease if performance pay benefits were removed.
10. Performance pay increased the amount of collaboration I participated in with my colleagues.

11. I feel the requirements outlined in my performance pay program have a significant impact on increased student success.
12. In my opinion, performance pay programs have an increased positive effect on teacher motivation.
13. In my opinion, performance pay programs have an increased positive effect on student achievement.
14. What components of performance pay do you feel had a significant impact on increased student achievement?

Appendix G

Lindenwood University

School of Education
209 S. Kingshighway
St. Charles, Missouri 63301

Informed Consent for Participation in Research Activities

"Merit Pay for Educators: An Investigation of Components Significantly Impacting Student Achievement"

Principal Investigator: Lisa G. Carlon

Telephone: xxx-xxx-xxxx E-mail: lgcarlon@gmail.com

Participant_____ Contact info _____

1. You are invited to participate in a research study conducted by Lisa Carlon under the guidance of Dr. Patricia Conner. The purpose of this research is to identify components of merit pay programs that positively affect student achievement.

2. a) Your participation will involve completion of a brief survey regarding your participation in merit pay programs in your school district. The survey will be conducted online through SurveyMonkey and the information you provide will remain anonymous. Survey questions will be straightforward and simple.

   b) The amount of time involved in your participation will be approximately ten to twenty minutes. Approximately 5,800 subjects will be involved in this research. This study will be conducted entirely in schools with current or past experience with merit pay programs. All schools will be surveyed regarding opinions and successes of merit pay. Surveyed schools will be located in Missouri and Arkansas. One Arkansas school will be investigated to determine the approach used to structure merit pay and the successes or failures they have experienced. A minimum of two administrators and two classroom teachers will be interviewed from this district.

3. There are no anticipated risks associated with this research.

4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about merit pay program affects and may help to improve educational decisions and practices affecting student achievement.

5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Lisa Carlon at (xxx) xxx-xxxx or the Supervising Faculty, Dr. Sherry DeVore at (xxx) xxx-xxxx. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at xxx-xxx-xxxx.

I have read this consent form and have been given the opportunity to ask questions. I may retain a copy of this consent form for my records. I consent to my participation in the research described above by completing this survey.

https://www.surveymonkey.com/s/meritpayforeducators

Vita

Lisa Gail Carlon currently serves as Technology Instructional Facilitator for the Green Forest, Arkansas school system. Teaching experiences include elementary grades 2, 3, 5, and 6, and various college level courses in education. Areas of professional interest are technology, leadership, and classroom management and motivation. Academic studies have resulted in a Master's Degree in Educational Administration from Missouri State University and a Bachelor of Science in Elementary Education from College of the Ozarks.