Mississippi Teachers’ Perception of Merit Pay

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ABSTRACT

MISSISSIPPI TEACHERS’ PERCEPTION OF MERIT PAY

by Diana Melissa Stephens

December 2015

Teachers are the center of increasing student achievement and student motivation, therefore, a way to motivate teachers must be implemented. Although most teachers are motivated intrinsically for their love of teaching, external motivation could add another component to teacher success. Merit pay is one way to provide an external motivator to change teaching strategies in order to increase student achievement. This study measured teachers’ perceptions in Mississippi, who are involved in the merit pay pilot program. There are four school districts participating in the pilot program, and two of those school districts were surveyed for this study, a central Mississippi school district and a south Mississippi school district. The data showed that teachers’ perception was moderate, and improvements to the program could be made to increase the positive perception of teachers’ regarding the merit pay program. No statistical difference was found between low and high socioeconomic schools, veteran teachers and nonveteran teachers, or teachers who teach tested grades, and teachers who do not. Therefore, regardless of where and who the teachers teach, they do not have a different perception of merit pay. When the merit pay criteria was correlated with teachers’ perception of merit pay, there was a moderate positive correlation revealing that if teachers understand and have buy-in to the criteria they are having to meet to earn merit pay they have a more positive perception of the program. Merit pay has the potential to motivate teachers to change
teaching strategies in the classroom when the focus stays on the successful strategies of implementing merit pay.
MISSISSIPPI TEACHERS’ PERCEPTION OF MERIT PAY

by

Diana Melissa Stephens

A Dissertation
Submitted to the Graduate School
and the Department of Educational Leadership and School Counseling
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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December 2015
DEDICATION

First, I would like to thank my husband for his love, support, and encouragement through this entire process. You were always cheering me on, and in the times I wanted to give up, you helped keep me on track. I would also like to thank my parents for their love and instilling in me a desire for learning and a drive to never quit.
ACKNOWLEDGMENTS

I would like to thank the professors and staff in the Educational Leadership office at The University of Southern Mississippi for always being willing to listen to me, answer questions, and help me stay on track for graduation. I would also like to thank Dr. David Lee and Dr. J.T. Johnson for their quick responses to my many questions throughout the dissertation process. Each of you were more than helpful and so patient through each step of the process. I could not have completed this without your help and guidance.
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CHAPTER I
INTRODUCTION

With such desire to improve the education of the students through quality teaching in the classrooms, the interest in merit pay has escalated in the 20th century. The landscape of education is changing to a more rigorous way of teaching by expecting teachers to increase student achievement more than ever before; The landscape is being embraced by policy makers who strive to create a more competitive high school graduate in the workforce (Adams, Heywood, Rothstein, & Koretz 2009; Slotnik, 2009). Great students are derivatives of great teachers, and according to the Gallup poll, 72% of Americans believe that those teachers should be rewarded for their hard work with some form of incentive (Bushaw & McNee, 2009).

Merit pay is additional compensation that rewards teachers for their improved teaching strategies in the classroom that improve student achievement (Liang & Akiba, 2011). Merit pay is not a new concept. Researcher Gratz (2009b) explained that in the mid-1800s, Great Britain implemented a merit pay system that was quickly discarded due to the lack of student growth and the increase in cheating, test cramming, and politics that resulted with the implementation of merit pay. In 1918, United States merit pay was in use by 48% of teachers surveyed (Gratz, 2009b). However, Podgursky and Springer, (2007) pointed out that by 1922 merit pay was replaced by a single salary scale, which compensated teachers solely based on the level of college degree they earned, and the number of years that they had taught.

Incentives in the teaching profession can be used to motivate teachers to improve the teaching strategies in the classroom, which in turn increases the academic
performance of the students. Some researchers contend that if teachers had an incentive to strive for throughout the school year the students would reap the benefits of a more successful teacher (Goodman & Turner, 2011). In order to encourage change in teacher compensation and student achievement, the United States government created the Teacher Incentive Fund (TIF). The government believed that the monetary incentive was successful in the first year and funding was quadrupled the second year of implementation (Koppich, 2010; Liang & Akiba, 2011; Springer & Gardner, 2010). Teachers would be awarded a monetary incentive through TIF grants if they showed an increase in student achievement throughout the school year (Liang & Akiba, 2011; Tryjankowski, et al., 2012). In addition to the TIF grants, the United States government implemented the Race to the Top grant for which school districts can apply if they have the data that show student growth and improved student growth (United States Government Accountability Office, 2011). Springer and Gardner, (2010) stated that during the Obama administration, another federal grant was established in 2011 titled the Teacher and Leader Innovation Fund to encourage the recruitment and retention of teachers, as well as rewarding those teachers who show growth in student achievement at the end of the school year. Government leaders are frequently implementing new grants and strategies to encourage student growth in public education (Springer & Gardner, 2010; United States Government Accountability Office, 2011). Merit pay is just another avenue that federal and state leaders are exploring to improve the academic growth in students throughout the United States.

Whether a federal teacher incentive or a state teacher incentive, there is a wide array of thoughts about the topic of teacher incentives, or merit pay. Each stakeholder has
his or her own opinion about merit pay. The opinions vary along the spectrum from merit pay not being a fair representation of teacher success and merit pay being the key to increasing student achievement in the classrooms (Bushaw & Gallup, 2008; Gratz, 2011; Lavy, 2007).

Most teachers are driven by intrinsic motivation to see the growth of the students they serve (Gratz, 2009b). However, stakeholders who are in support of a merit pay compensation system believe that extrinsic motivation can add a motivation component to teacher success and in turn student success. Researchers have identified four major areas merit pay could be beneficial. One area, according to Liang and Akiba (2011), where merit pay can be beneficial is by increasing student performance. Liang and Akiba (2011) also state that merit pay can increase teachers’ intrinsic motivation. Recruitment and retention of teachers are another area that Greenlee and Brown (2009) found where merit pay can create a positive impact. The fourth area stated by Hess (2010-2011) is the increase of teacher accountability and productivity. There are studies that support these findings of merit pay benefiting student achievement.

Two studies that support merit pay was conducted by Winters, Green, Ritter, and Marsh (2008) and Weldon (2011), which found that students taught by teachers who were eligible for the bonus scored higher on the state tests in all core subject areas as opposed to those students taught by teachers not eligible for the bonus. Winters et al. further explained that the bonus was seen to be most effective with those teachers who were considered to be the least effective when the program started. If the low-performing teachers were able to increase test scores of low-performing students, according to Winters et al., then performance pay programs have the potential to improve student
achievement as well as teacher productivity, which reduces the achievement gap (Winters et al., 2008). When Winters et al. reported the data they stated that the authors controlled for student characteristics in order to determine if real student gains took place.

According to Winters et al., “performance pay may be an effective strategy not just for improving overall achievement, but more particularly for closing the achievement gap” (p. 2). Although this research study found merit pay to be a positive impact in student achievement, other researchers have found the opposite effect when merit pay was implemented and found no impact on student achievement.

Researchers found that successful merit pay programs that increased student achievement had multiple factors in common. Rebore (2007) reported that the merit pay program must be linked and built on the school district’s mission for it to be successful. Teachers should be encouraged to engage deeper in the school district mission when striving to earn merit pay and increase student achievement. In addition to linking merit pay to the mission, it must gain employee acceptability and buy-in, which can be created through teams of stakeholders who create the merit pay criteria, according to Slotnik (2009). The reason that teachers and stakeholders should be included in the process, according to Rebore, is for the teachers to become more engaged in the process, which creates more buy-in. Through the teachers being engaged in the process they are able to better understand the merit pay program. According to Tryjankowski et al. (2012), teachers need to know exactly what to do in order to achieve the goals of the merit pay system for the program to be successful. Once they understand the program, the criteria to earn the merit pay compensation should be fair and reachable. According to Lavy
the system should be fair, attainable, and valuable enough in order for teachers to be motivated to improve teaching strategies and earn merit pay.

On the contrary, some researchers found the drawbacks to merit pay, such as harming the school culture, teaching to the test, difficult to measure, and nonmotivating to teachers. According to Gratz (2011), merit pay harms the school culture by creating competition between the staff members resulting in teachers not collaborating regarding best teaching practices. In addition to harming the school culture, Clabaugh, (2009) found that merit pay creates more focus on the end of the year test, shifting the mission of the school from teaching the whole child to teaching to the test. Not only does merit pay take the focus off teaching the whole child, it is difficult to measure individual success in the field of education because it is a collaborative effort (Lavy, 2007). When teachers are teaching to the test and losing the collegiality of teaching, it de-motivates teachers who began teaching for their passion of seeing students succeed (Gratz, 2009a). Researchers and school districts have seen these negative effects of merit pay when implementing merit pay.

Although some studies found that merit pay benefits student achievement, other studies found that merit pay did not motivate teachers enough to increase student achievement. The Teacher Advancement Program in Chicago and the Project on Incentives in Teaching program in Nashville are examples of merit pay implementation not succeeding. TAP was implemented in 40 high-needs schools, and there was no evidence that the group merit pay incentive increased student test scores, had an impact on teacher retention, or had an impact on positively changing the school climate (Glazerman & Seifullah, 2012). Glazerman and Seifullah (2012) concluded that the
Chicago TAP program was unsuccessful in the implementation of the merit pay system. Another merit pay program that was considered unsuccessful was the POINT program in Nashville, Tennessee. Authors Springer et al. (2010), found results that concluded that student performance would not increase if teachers were awarded large sums of monetary incentives. Although teachers were not competing against each other for the bonus awards, Springer et al. concluded that overall teachers did not support the program, motivation did not increase among the teachers, and student achievement did not increase when a substantial amount of money was offered as a merit pay bonus.

If implemented correctly, merit pay can motivate teachers to change their teaching strategies to improve student achievement; however, if the program is implemented without teacher buy-in, without being linked to the mission, and without achievable criteria, merit pay is a waste of time and money. These studies show that merit pay is still a work in progress in creating a compensation system that will motivate teachers to a level of change. Therefore, more research must be conducted to add to the previous studies and create a more comprehensive outlook on merit pay. The research conducted in Mississippi on the merit pay pilot program will add to the previous research to better understand the perceptions that teachers have on the merit pay program. In addition to adding to the body of research as a whole, this research will add to the Mississippi research to determine if merit pay is beneficial in improving student achievement in the state.

Statement of the Problem

Increasing student achievement is at the core of educating children. If merit pay could be a building block of increasing student achievement, then it is worth researching.
Teacher compensation has an effect on the retention of highly qualified teachers, therefore merit pay could encourage more college graduates to enter into the teaching profession as well as retain those veteran teachers to stay in the profession (Goldhaber, Dearmond, & Deburgomaster, 2011). Researchers, such as Gratz (2009b) and Rebore (2007), stated that merit pay increases intrinsic motivation in teachers, which in turn improves the teaching strategies in the classroom (Morey, 2008). Another area that merit pay improves is in recruiting and retaining teachers (Hess, 2010/2011; Lavy, 2007; Rebore, 2007), which benefits the finances of the school district and creates a more cohesive school atmosphere (Glazerman & Seifullah, 2012). In addition, according to Lavy (2007), merit pay will encourage more accountability and productivity in teachers. Although some researchers find merit pay to be beneficial to improving student achievement, other researchers are against the idea of merit pay.

Reasons such as harming the school culture, teaching to the test, difficult to measure, and not motivating are why some researchers are against the idea of merit pay in an education setting. Gratz (2011) and Lavy (2007) found merit pay to hinder the culture of a school, which has a large effect on the success of the students. If the teachers are not working collaboratively because they are competing against one another, then successful teaching strategies will not be shared (Clabaugh, 2009; Donlevy, 2008). When a monetary reward is being offered, teachers are going to focus more on teaching to the test than on developing the whole child (Gratz, 2009a), such as social and emotional growth (Solmon, 2005). Not only does merit pay damage the school culture and promote teaching to the test, according to Clabaugh (2009), it is also difficult to measure. Teaching is an abstract profession in which areas such as personal growth and
social growth cannot be measured numerically and cannot be calculated into an equation to reward merit pay (Murnane & Cohen, 1986). In addition to teaching to the test, Hanushek and Rivken (2007) found that teachers are not motivated by money. Teachers enter the profession because they have a passion for seeing students grow academically and socially, not because they are going to earn a high salary (Tryjankowski, et al., 2012). If merit pay has the potential to increase teacher motivation and teacher retention, which in turn could increase student achievement, then there is merit in conducting research.

There are multiple research studies that outline a case for merit pay and a case against merit pay; therefore, more research needs to be completed to add to the previous research, which is why understanding the perceptions of teachers in Mississippi regarding merit pay is important to add to the body of research. This study will gather perceptions from certified Mississippi teachers in two of the four school districts piloting the merit pay program, which are Gulfport and Rankin County school districts. The other two school districts that are a part of the pilot program but not participating are Clarksdale School District and Lamar County School District. Not only will this study add to the body of research, it will benefit the four school districts in Mississippi who are piloting the program to understand the teachers’ perceptions regarding merit pay and how it is being implemented in the state. If a study is not conducted regarding the Mississippi merit pay pilot program, the state could be spending money that does not affect student achievement.

Purpose of the Study

Teachers who are employed in Gulfport and Rankin County school districts in the state of Mississippi were surveyed to understand the perceptions of teachers who are
going through the merit pay pilot program. The study collected data regarding the socioeconomic area the teachers are teaching in, how much they understand about their school districts’ merit pay program that they are involved in, how motivating the merit pay program is for the teachers to change their teaching habits, and how fair and attainable they think their school districts’ merit pay criteria are. After the results of the study were analyzed, the perceptions of Mississippi teachers were better understood regarding the benefits, challenges, and oppositions of the pilot program in the state. Not only were perceptions of teachers available, a comparison of lower socioeconomic schools to higher socioeconomic schools was analyzed. A low socioeconomic school in this study is defined as a school that receives Title 1 funds, which is funding given to school that serves at least 40% of students at or near the poverty level (Title 1, 2012). A high socioeconomic school in this study is defined as a school that does not receive Title 1 funding. In addition, the perceptions of veteran teachers, who have taught more than five years, and new teachers who have taught five years or less was analyzed. Furthermore, teachers in tested grades and nontested grades were analyzed when all data was collected; how motivating merit pay is for teachers to improve teaching strategies was analyzed; and the relation between the merit pay criteria in their school district and the teachers’ perception was analyzed when data was collected. In August of 2014, the second year of the Mississippi merit pay pilot program was implemented, and in October 2014 the first merit pay bonus was awarded. These timelines allow for the data to be analyzed more closely. Therefore, the purpose of this study was to have a better understanding of how the pilot program was perceived by the teachers in the state and
allow for school districts and state officials to make improvements before implementing merit pay statewide.

Research Questions

Merit pay can be examined through a variety of variables within the education setting. This study addresses the following research questions:

1. What are the perceptions of teachers in the state of Mississippi regarding merit pay?
2. Do teachers in a low socioeconomic school have a different perspective than those teachers in high socioeconomic school?
3. Do perceptions differ between veteran teachers who have more than five years of experience as opposed to teachers with 5 or less years of experience?
4. Do teachers’ perceptions in nontested grades differ from teachers’ perceptions in tested grades?
5. Do the criteria set up by the individual piloting school district have a relation to the teachers’ perception?

Definition of Terms

*Administrator* - a person whose job is to manage a school (http://www.merriamwebster.com/dictionary/administrator?show=0&t=1413644513).

*Achievement test* - is designed to measure a person's level of skill, accomplishment, or knowledge in a specific area; for example, a chapter test or end of the year comprehensive test (http://psychology.about.com/od/aindex/a/achievement-test.htm).

Charter schools - independent public schools funded with taxpayer dollars and do not follow the same laws as traditional public schools; they are bound by the terms of their charter, which includes the school mission, academic goals, and accountability procedures.


Merit Pay - “a compensation system that rewards teachers with extra financial rewards beyond the annual salary raise on the salary schedule for outstanding performance in the performance evaluation” (Liang & Akiba, 2011, p. 848).

No Child Left Behind - an accountability measure implemented in 2001 by the George W. Bush administration shifting education from a local level to a state and federal level (Callier, 2010).

Nontested Grade – as defined in the study a grade when students do not take a state mandated standardized test


Race to the Top - a federal grant given to those states that apply and show they are recruiting and retaining effective teachers, schools are improving, data are available to show student growth, and can show education standards that are preparing students for the future (United States Government Accountability Office, 2011).
Single Salary Scale: consists of two components, college degree and years of teaching experience; more money is earned depending on the level of college degree, and how many years the person has been teaching (Hess, 2010-2011).

Stakeholder - a person, group, or organization that has interest or concern in an organization (http://www.businessdictionary.com/definition/stakeholder.html).

Step in Lane Pay - consists of two components, college degree and years of teaching experience; more money is earned depending on the level of college degree and how many years the person has been teaching; used synonymously with single salary scale (Hess, 2010-2011).

Teacher and Leader Innovation Fund - a 2011 federal government grant “that would support the development and implementation of performance-oriented approaches to recruiting, retaining, and rewarding highly effective educators” (Springer & Gardner, 2010, p. 8).

Teacher Incentive Fund - a 2006 federal government initiative that states could compete for if they implemented new forms of teacher pay if increased student achievement was shown (Tryjankowski, et al., 2012).

Tested Grade – as defined in the study it is a grade when students are required to take a state mandated standardized test

Title 1 Funding- funding given to school that serves at least 40% of students at or near the poverty level (Title 1, 2012)

Title 1 School – a low socioeconomic school that receives Title 1 funds (Title 1, 2012).
**Value-added model** – combination of teacher contribution to student achievement (Callier, 2010; Glazerman & Seifullah, 2012).

**Delimitations**

There are delimitations within this study such as it will only survey Mississippi teachers working in two of the four school districts piloting the merit pay program. Only two school districts gave permission for their teachers to participate in the study. The questionnaire sent to the teachers only collected data based on the research questions and based on the key components found in the research that build a successful merit pay program. The study will not focus on the broad perception of merit pay, but focus on teacher motivation to earn merit pay within the state of Mississippi.

**Assumptions**

During the course of this study, there were several assumptions that could be made. One assumption is that the respondents have a surface level knowledge of merit pay and how it is being implemented in their school district. With the knowledge each district is providing the teachers, another assumption is that each participant will answer the survey honestly. Before participants answered the survey, there was an assumption that they will answer individually and not discuss the survey with other participants.

**Justification**

The main goal of teaching is to prepare students for the success when entering the workforce. Each day is a day for them to gain a greater knowledge of what they will encounter, and how they will solve the problems they face. Systems in the classroom are constantly evolving in order to improve student achievement. Merit pay could, or could not, be a driving force for increasing student achievement; therefore, the research would
analyze the perception of teachers regarding merit pay to determine if it would be beneficial. Merit pay has a broad spectrum of opinions ranging from teachers who support merit pay, teachers who are indifferent, and teachers who are strongly against incorporating merit pay in the education profession. Mississippi is eager to find ways to strengthen the public school system by motivating teachers to increase the rigor in the classroom to improve student achievement. Merit pay is just one way to possibly increase student achievement through teacher motivation. This research will provide data on Mississippi teachers involved in the merit pay pilot program and clarify if the merit pay program is beneficial in the state of Mississippi. If monetary compensation does not motivate the teachers, then the merit pay pilot program in each of the four school districts need to take a closer look at how they implemented the program and redesign the program to improve teacher perceptions and motivation. If merit pay is seen to have an extremely negative perception among the teachers surveyed, it may not be the answer that the Mississippi education profession needs to raise student achievement. However, if it is seen through the data that merit pay motivates teachers extrinsically to alter certain teaching habits in order to see student achievement increase, it is well worth the time and effort of those education leaders who are developing the merit pay initiatives.

Summary

Merit pay has its pros and cons. Research studies show both sides to the debate regarding whether or not merit pay increases student achievement. The history of merit pay began in the 1800s and has since been a form of teacher compensation that elected officials and education leaders have looked to in order to increase teacher motivation and student achievement. Between the government initiatives such as Race to the Top,
Teacher Incentive Fund, and Teacher and Leader Innovation Fund and the merit pay programs that have been implemented in Chicago and Nashville there have been areas that were successful and areas that needed improvement.

Researchers found that merit pay could be beneficial in providing intrinsic motivation for teachers to improve teaching strategies, and in turn, improve student achievement. Not only could merit pay have the potential to motivate teachers, it could also help recruit and retain high quality teachers. If high quality teachers who are passionate about seeing students grow academically and socially would be recruited to schools, then students would grow in their knowledge. Leaders must inspect what is expected of their teachers, and merit pay could raise the accountability and productivity of teachers in order to reach the high level of expectations. When teachers are eager to do their best, the students have the potential to succeed at their highest potential. If merit pay is going to be beneficial in teacher motivation, it must be built around certain criteria.

The main criteria that researchers have found that merit pay should be linked to are the school district’s mission (Slotnik, 2009). A mission is created to provide a road map for instruction and learning goals within the school district. Any new initiative, or merit pay, that is implemented in the school district should be linked to the mission that guides the district. During the process of planning how merit pay is implemented, teachers should play a vital role to the development, creating buy-in from the very people earning the merit pay. Allowing them to play a critical role in the development creates ownership, as well as enables them to understand and know the system so that they will speak knowledgably to those they come in contact with in the community. Not only does the merit pay system have to be understood, it should be fair and attainable. Just as any
goal should not be so out of reach that it cannot be attained, merit pay should be attainable and fair when the criteria are created. Although some researchers find merit pay to be productive in increasing student achievement, other researchers find the opposite effect and find that merit pay harms rather than helps a school.

When competition is implemented in any arena, it could potentially harm the atmosphere and the people. Researchers found that merit pay harms a school culture by creating animosity through competition (Goldhaber, DeArmond, & Deburgomaster, 2011; Gratz, 2011; Morey, 2008). Through the animosity there is a break down in collaboration between teachers, and they isolate themselves for individual gain. Teaching is a profession that is built on collaboration. When teachers isolate themselves, teaching strategies are not shared and student growth is affected. In order to achieve the goal of merit pay researchers find that teachers teach to the test and forfeit the social and emotional goals that are written in most school mission statements.

The division of research showing the positive effects of merit pay as opposed to the negative effects of merit pay is broad and no clear-cut answer exists. Therefore, this research is important to add to the body of research already in existence to help understand teachers’ perception of merit pay in Mississippi. After analyzing teachers’ perception, the data will be beneficial to explore more avenues in which merit pay either hinders or helps the education system.
CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Education has a long history with compensation of employees. This literature review provides the background of teacher compensation from the early years of the 1800s when formal education began in a one-room schoolhouse (Koppich, 2010). Teacher compensation shifted from a room and board pay, to a grade-based pay, and then to the most common, a single salary pay (Springer & Gardner, 2010). Within the realms of compensation, merit-based pay is found, and this literature review discusses the history of merit-based pay, the United States’ interest in merit-based pay, and the types of merit-based pay.

There are people who argue the positive aspects of merit pay and those who argue the negative aspects of merit pay; within this literature review both sides are discussed. Information was found by researchers such as Glazerman and Seifullah (2012), Woessmann (2011b), and Lavy (2007), which provides a case for the positive aspects of merit-based pay and how it increases areas of education. However, on the opposing side, researchers Murnane and Cohen (1986), Tryjankowski, et al. (2012), and Gratz (2009a) have found aspects of merit-based pay that provide a case against merit-based pay.

Positive aspects of merit pay and negative aspects of merit pay are discussed in the literature, as well as merit pay programs that were successful and merit pay programs that were unsuccessful. When researchers such as Goldhaber and Walch (2012) and Liang and Akiba (2011) analyzed key components of a merit pay system, they found five components that help them succeed and are discussed in the literature review. In addition
to the key components, successful merit pay programs as well as unsuccessful merit pay programs are discussed at the end of the literature review.

Theoretical Framework

Motivation, what is it and does it work? According to Sadri and Bowen (2011), “motivation relates to a range of psychological processes that guide an individual toward a goal and cause that person to keep pursuing that goal” (p.45). Motivation can come in many different sources, and in the classroom, one source is the teacher. Teachers are the catalyst to inspire students to excel at their highest potential. Therefore, motivating teachers could in turn motivate students. In his book, Pink (2009) explained that genuine motivation consists of “autonomy, mastery, and purpose” (p. 49). If increasing student achievement is the purpose, then teacher motivation may work through merit pay programs.

Education and political leaders have experimented with a myriad of ideas to increase student achievement through federal merit pay programs. The federal government has implemented the Teacher Incentive Fund in order to increase teacher motivation as well as the Teacher and Leader Innovation Fund as a way to retain, recruit, and motivate teachers to improve teaching strategies in the classroom that would increase student achievement (United States Government Accountability Office, 2011). However, researchers question if money, through means of merit pay, will externally and internally motivate teachers.

Most teachers did not enter the profession because of the salary, which is why Lavy (2007) stated that teachers are motivated by witnessing the success of students and helping them grow into successful citizens. However, not all teachers are motivated by
the same stimuli or are on the same level, according to Maslow’s Hierarchy of Needs. As much as Callier (2010) believed, teachers should be financially rewarded for improving students’ academic growth if the teacher is not motivated by monetary rewards then it is not beneficial. If the financial reward increases motivation in the teacher to change and improve the teaching strategies, the level of motivation has been met (Lavy, 2007).

Abraham Maslow’s “theory of human needs and motivation found that people fulfilled physical, security, social, esteem, and self-actualization needs in an orderly, ascending fashion” (Kiel, 1999, p. 167). Maslow’s hierarchy of need shows that “each need has to be satisfied substantially in order for an individual to progress to the next level” (Sadri & Bowen, 2011). There are five levels in Maslow’s hierarchy of need starting with the lowest level, the physiological level. This level, according to Sardi and Bowen (2011), is the most basic needs such as food, air, water, rest, and the need to be active. In this level monetary rewards are successful (Sardi & Bowen, 2011). Once a person reaches the level of satisfaction in the physiological needs, he or she graduates to the next level, which is safety. According to Maslow, the safety need is keeping safe from physical and psychological harm (Anderson, 2004; Cutler, 2010; Sardi & Bowen, 2011). After the level of safety has been met the individual enters the next level of motivation, which is the need to feel loved and belong (Anderson, 2004). This level is being met when teachers work collaboratively together to achieve the goal of student achievement (Sardi & Bowen, 2011). After a person feels that he or she is loved and belong then Maslow’s hierarchy moves to the need of esteem. According to Anderson (2004), Maslow’s level of esteem has two types of esteems: self-esteem, which can be accomplished through mastering a task, and recognition esteem, which can be achieved
through recognition from others for reaching a goal. The last level of Maslow’s hierarchy of need is self-actualization. Anderson (2004) defined self-actualization as the “desire to become more and more what one is, to become everything that one is capable of becoming” (p. 51). Maslow’s hierarchy levels are building blocks on the previous level, and Cutler (2010) stated that “levels aren’t skipped; a person needing food can’t be much interested in self-esteem” (p. 6).

Understanding Maslow’s hierarchy of needs is important to choosing the proper motivator. If teachers are not motivated by monetary rewards, if used in isolation, they may undermine a teacher’s true motivation (Lavy, 2007). “Research has shown that lack of recognition from their direct supervisor is one of the main reasons employees leave their jobs” (Sadri & Bowen, 2011). In addition to merit pay, or monetary reward, additional motivation factors should be implemented, such as recognition and praise, in order to provide true motivation and a positive atmosphere (Sadri & Bowen, 2011). A teacher’s motivation plays heavily on how successful student growth may be, and if monetary rewards through merit pay will increase teacher motivation then it is worth researching to determine if it is going to be a successful type of motivation.

Teacher Compensation

History of Teacher Compensation

Teachers have been paid through many different avenues in exchange for their methods of teaching, skills, and knowledge in educating the bright minds of the future. According to Koppich (2010) and Protsik (1995), in the 1800s, when schooling began in a one-room schoolhouse, most teachers were young females “and had only an elementary education themselves” (Koppich, 2010, p. 9). When formal education began, so did
teacher compensation. Teacher compensation began in the 1800s when teachers were compensated through room and board (Protsik, 1995). Young teachers would rotate from one student’s house to another student’s house until their teaching year in the one-room schoolhouse was complete (Koppich, 2010). This type of teacher compensation provided a way for the students’ families to ensure that the teacher of the small rural community was living her life to the moral standards of the people who lived and worked in the area (Koppich, 2010; Protsik, 1995). Between 1820 and 1870, when the country was moving from an agriculture way of life to an industrial way of life, the role of the school began moving in a different direction as well, and grade-based compensation began (Protsik, 1995; Springer & Gardner, 2010).

**Grade-Based Compensation**

The one-room schoolhouse transformed into a multi-room school around 1870 with increased rigor in the curriculum, which in turn brought about grade-based compensation (Springer & Gardner, 2010). Grade-based compensation was built around the skills that a teacher needs to teach a child at a certain grade level in school, thus educational leaders of the 1800s thought that high school teachers needed more skills than elementary teachers (Protsik, 1995; Springer & Gardner, 2010). Due to the fact that in the 19th century most of the elementary teachers were female, this type of compensation reinforced gender inequalities (Koppich, 2010; Protsik, 1995; Springer & Gardner, 2010). The men who taught at the high schools were paid a higher compensation than the females who taught at the elementary schools, which in turn widened the pay gap between males and females (Koppich, 2010; Morey, 2008). In order to shrink the pay gap and reduce gender inequalities, in 1921, leaders in Denver,
Colorado, and Des Moines, Iowa, formed a new type of compensation called the single salary scale (Gratz, 2009b; Koppich, 2010; Morey, 2008; Springer & Gardner 2010).

**Single Salary Compensation**

The single salary scale, or the step-in-lane scale, began in 1921 after World War I (Gratz, 2009b; Koppich, 2010; Morey, 2008). It had two main components by which teachers were compensated: the college degree that was earned and the years of teaching experience (Hess, 2010-2011; Goldhaber & Walch, 2012). Not only did the single salary compensation equalize pay, Koppich (2010) stated, “it removed politics, race, and gender from the process” (p. 23) making pay raises more predictable. Raises are given, Gratz (2009b) explained, when “teachers receive annual ‘step’ increases as well as ‘lane’ increases if they earn additional degrees” (p. 77), with each step increase referring to the years of experience and each lane increase referring to each college degree the teacher has earned (Gratz, 2009b).

Currently, each individual state determines the salary that teachers earn and the raises that are offered (Oden & Picus, 2008). As Oden and Picus (2008) explained, “school finance systems consist of a set of statutes passed by the state legislature that govern the distribution of educational resources within the state” (p. 30). The Mississippi Adequate Education Program (MAEP, 2013) salary schedule shows the base salaries that legislatures set for teachers with different years of experience and different levels of college degrees. For example, with zero years of teaching experience and a bachelor’s degree, a teacher would earn $30,900 for the first year of teaching (MAEP, 2013). However, if the teacher enters the profession with a master’s degree, specialist degree, or a doctoral degree and zero years of experience, his or her salary would be $32,960,
$33,990, or $35,020, respectively. The following year when the teacher has one year of experience, a step increase is awarded for the additional year of teaching experience, and the salaries would be as follows for a bachelor’s degree - $31,395, master’s degree - $33,620, specialist degree – $34,717, and doctoral degree - $35,814 (MAEP, 2013).

By the 1960s, the single salary scale system was in 97% of the school districts throughout the United States (Koppich, 2010). There are many reasons why teachers and districts deem the single salary scale as a positive move. For example, the single salary scale decreases the competition between teachers and promotes collegiality (Goldhaber, Dearmond, & Deburgomaster, 2011). Furthermore, it gives the education field an objective pay scale thought to be fair to all teachers (Hanushek & Rivkin, 2007).

Consequently, the single salary scale does not encourage the retention of teachers or the recruiting of highly qualified, talented teachers with specific skill sets (Goldhaber et al., 2011). Every teacher is compensated equally and fairly, making it a one-size-fits-all approach and creating a uniformed pay scale, thus not allowing those uniquely talented teachers to be rewarded (Hess, 2010-2011; Morey, 2008). The single salary scale makes the education profession undesirable for many different types of people, such as individuals who are highly self-motivated and productive, people who have technical skills, or people who are eager to move up the professional ladder (Goldhaber & Walch, 2012). Other drawbacks to the system that Morey (2008) found were that it contributed to teacher boredom and decreased motivation due to the predictability. According to Hanushek and Rivkin (2007), the single salary system could not identify quality teachers in the classroom who brought in effective teaching strategies that resulted in student growth. According to Solmon (2005), “there are alternatives to the traditional ‘step-and-
column’ pay in which no one will earn less than in the traditional system” (p. 19); one alternative is adding a merit pay bonus to the already existing salary of a teacher. As a result of wanting to see student achievement increase, around 1980 educational leaders in the United States began experimenting again with merit pay compensation, which is an alternative to single salary compensation, to reward successful and motivated teachers (Donlevy, 2008).

**History of Merit Pay**

Merit pay is defined by Liang and Akiba (2011) as “a compensation system that rewards teachers with extra financial rewards beyond the annual salary raise on the salary schedule for outstanding performance in the performance evaluation” (p. 848). Researchers occasionally use the terms merit pay and pay-for-performance interchangeably (Donlevy, 2008; Glewe, Ilias, & Kremer, 2010; Goodman & Turner, 2011). For this study, the term merit pay will be used throughout. Merit pay has a history that dates back to the mid-1800s when teachers in Britain were paid based on their students’ test scores at the end of the school year; however, it was discarded because it failed to show student achievement (Gratz, 2009b). Gratz contributed the discarded merit pay program to reasons such as cheating, test cramming, and testing bureaucracy. In 1907, Great Britain’s chief education inspector, Edmond Holmes, compared the use of merit pay to teachers laying down a thin layer of knowledge on the brains of the students just to see the increased test scores at the end of the school year (Gratz, 2009b). As a result of the thin layer of knowledge, the students were not gaining a deep knowledge of the material; they were just gaining the general idea of a concept (Gratz, 2009b). This
approach to education encouraged teachers to teach-to-the-test and for the rewards that were associated with test scores (Tryjankowski, et al., 2012).

Merit pay was not completely discarded; when public school districts in the United States were surveyed in 1918, 48% described their pay scale as merit based (Gratz, 2009b). The reason the survey participants described the pay as merit based is because high school male teachers were receiving higher compensation for what was thought to be a higher skilled position and in turn were granted higher compensation for their knowledge and perceived success (Gratz, 2009b; Tryjankowski, et al., 2012). This type of merit pay is what contributed to the compensation gap between males and females. By 1922, merit pay was replaced with the single salary scale compensation, and when participants were surveyed again in 1950 only 4% of school districts in the United Stated described their pay as merit pay compensation (Gratz, 2009b; Podgursky & Springer, 2007). After the Soviet Union launched Sputnik in the 1960s, United States President Richard M. Nixon tried to increase the education of the students by providing merit pay to the teachers (Gratz, 2009b). However, Gratz continued by stating that the merit pay President Nixon implemented only created cheating on the tests in order to reach the reward. The struggles to improve education in the United States continued and a national report was published that examined the entire education systems (Gratz, 2009b; Walker, 2013).

On April 26, 1983, the United States published a report titled *A Nation at Risk* (Walker, 2013). The report examined the quality of education in the United States, and Walker stated that it found, “test scores were rapidly declining, low teaching salaries, and poor teacher training programs were leading to a high turnover rate among educators, and
other industrialized countries were threatening to outpace America’s technological superiority” (p. 1). Ronald Reagan was president of the United States when *A Nation at Risk* (1983) report was published and longed to improve the so-called failing education system while he was in office. One way President Reagan tried to improve the so-called failing education system was through implementing merit pay (Gratz, 2009b). It was thought that merit pay could be used to meet the goals of a school district and increase the performance of the teachers, which in turn increases the performance of the students (Lavy, 2007). Murnane and Cohen (1986) studied six school districts that had implemented merit pay for at least 6 years. Information was gathered through interviews with teachers, visits to the schools, and school district documents. After the study was complete it was found that merit pay had very little direct impact on instructional practices (Murnane & Cohen, 1986). Merit pay failed and the single salary system continued to be used as the compensation system for teachers (Gratz, 2009b; Podgursky & Springer, 2007).

**Teacher Quality**

As a result of the publication of *A Nation at Risk* (1983), President Reagan and educational leaders soon realized that United States students were falling behind students in other countries in terms of achievement. Therefore, political leaders began discussing merit pay to encourage high quality teaching practices (Gratz, 2009b). Teachers are a direct indicator of how much knowledge students will gain during the school year (Hanushek & Rivkin, 2007).

Teacher quality is the pillar of a successful classroom (Adams et al., 2009; Hanushek & Rivkin, 2007). Liang and Akiba (2011) stated, “previous empirical
literature has consistently shown that teachers play a critical role in improving student achievement” (p. 845). According to Hanushek and Rivkin (2007), if teacher quality is important, school district leaders should be hiring teachers based on their effectiveness to teach, not on their years of teaching experience, which is how the single salary scale is laid out. Principals can easily identify the top performing teachers with the top performing teaching strategies when the students who are taught by those teachers show tremendous growth year after year (Hanushek & Rivkin, 2007).

Research shows that quality teaching is important in the success of a student’s growth; therefore, top teachers should be compensated monetarily (Goodman & Turner, 2011). According to Goodman and Turner, merit pay has the potential to bring higher qualified teachers into the classroom and could be used in the school to promote successful teaching. Therefore, Gratz (2009a) stated that political leaders “proclaim one primary purpose for all schools – academic achievement as measured by standardized tests – with the implication that high test scores will protect the nation, grow the economy, and assure our future” (p. 32).

**Merit Pay is Back**

With such desire to improve the education of students through quality teaching in the classrooms, the interest in merit pay escalated in the 20th century and has continued to do so into the 21st century. The landscape of education is changing to a more rigorous way of teaching by expecting teachers to increase student achievement more than ever before, which is being embraced by policy makers who strive to create a more competitive high school graduate in the workforce (Adams et al., 2009; Slotnik, 2009). Merit pay programs are again gaining popularity across the United States with
accountability being a cornerstone of education policy (Adams et al., 2009; Lavy, 2007; Liang & Akiba, 2011). While it may be true that merit pay has been an obscure component in education, it is being used again in an attempt to improve schools and teachers’ strategies (Green, 2010). Although merit pay is not a new concept, it is easier to implement due to the improved scientific analyses and technology, which makes linking individual student test scores to individual teachers easier and more efficient (Adams et al., 2009; Springer & Gardner, 2010). Due to improved scientific analysis, there has been a growing interest from educational and political leaders in using merit pay to reward individual teachers who are successful in showing improvements with the students they teach, rather than just reward the success of a school (Adams et al., 2009). Even though scientific analysis has improved, the education budget has not. Merit pay bonuses may have an effect on the finances of the budget at the state and district levels (Slotnik, 2009). The state and district budgets are affected, Slotnik states, because “more than 80 percent of a district’s operating budget goes to compensation” (p. 32). Since public school districts are funded by tax revenue, extra money could be difficult to obtain (Odden & Picus, 2008).

In firms, corporations, and private businesses, people want to know that the money is being used correctly and appropriately (Lavy, 2007; Slotnik, 2009). It is likely no different in the field of education. Rebore (2007) explained that “the accountability movement, with taxpayers demanding a return on their dollar from school district employees by way of increased student performance” (p. 252), which is why the accountability movement is becoming more prevalent. Therefore, most people, or taxpayers, want to know that the money spent on education is being used effectively
(Slotnik, 2009). Currently teachers are paid using the single salary scale, which is based on their years of experience and level of degree, which does not reward successful teaching. Since, according to Rebore (2007), “80 percent of all school district expenditures are for salaries and benefits” (p. 13), inefficiency “can potentially cost the taxpayer unnecessarily large sums of money” (p. 13).

Therefore, according to Adams, et al. (2009), if schools are organized and operated like a private business firm by rewarding success and punishing those employees who do not meet the goals, students will gain a greater education and taxpayer money will be spent more effectively. Phi Delta Kappa and Gallup surveyed 1,000 adults regarding merit-based pay for teachers and found that 72% of Americans favored using merit-based pay as an incentive. The respondents further suggested that advanced degrees, student test scores, and administrator evaluations should be used to determine if merit pay is earned by the teacher (Bushaw & McNee, 2009). Most politicians and U.S. taxpayers are convinced that linking pay to performance will change the direction of the country’s education system and create a more positive reputation for public schooling (Lavy, 2007).

In order to hold teachers more accountable for student success, in 2001, the No Child Left Behind (NCLB) Act was implemented, which was a performance management tool for districts across the country (Caillier, 2010). This accountability measure consisted of federal educational standards that must be met by states and districts, which shifted the responsibility of educating students from a local level to the state and federal levels (Caillier, 2010). According to Caillier, one thing that the NCLB did not focus on was curriculum and teaching strategies in the schools, so a value-added model, which
would link teacher pay to student performance, was added to assist in improving the
teaching strategies in the classroom. With the value-added model came controversy,
because it linked teacher pay to how the students performed in the classroom (Caillier,
2010). Merit pay, which is based on teacher accountability increasing student
performance, became more popular since the NCLB because the accountability of school
districts is being closely watched, and the need to recruit successful, high quality teachers
is evermore important (Liang & Akiba, 2011; Podgursky & Springer, 2007).

In order to employ successful teaching in low-performing school districts, 40 %
of states offered incentives for teaching in hard-to-staff areas, which usually consist of
low-socioeconomic areas, and 30 % of states offered incentives for teaching in hard-to-
staff subject areas, such as math and science (Goldhaber, et al., 2011). If higher qualified
teachers are rewarded to teach in hard-to-staff areas, then student success may increase.
This could possibly be the reason most educational leaders believe that the end of the
year test scores will improve; however, merit pay puts the focus on test scores rather than
the teaching strategies in the classroom (Gratz, 2011).

Due to the fact that NCLB produced little evidence of increasing student
achievement, more funds were made available to continue to help improve student
achievement (Caillier, 2010). The Race to the Top (RTT) grant funded by the federal
government through $4.3 billion links student performance to teacher and administrator
pay (Springer & Gardner, 2010; Tienken, 2011; Tryjankowski, et al., 2012). States that
apply for the RTT grant must show that they are recruiting and retaining effective
teachers, show that low-performing schools are improving, collect data to show student
growth, and create education standards that are preparing students for the future (United States Government Accountability Office, 2011).

There are two rounds during which states can apply to receive RTT grant money; however, states must apply in the first round in order to be considered for receiving money in the second round of grant awards. If a state meets all of the criteria for the award in round one, the RTT award is granted; however, if states need to make improvements to the grant application it can be completed and submitted for an award in round two (USGAO, 2011). In the first round of the RTT grant only two states, Tennessee and Delaware, were awarded money for successfully implementing strategies that link student success to teacher performance (Tryjankowski, et al., 2012). However, in the second round, 10 applicants, the District of Columbia, Florida, Georgia, Hawaii, Maryland, Massachusetts, New York, North Carolina, Ohio, and Rhode Island, were successful in meeting all of the RTT application criteria to receive the grant money (Tryjankowski, et al., 2012). Not only have federal funds been made available to encourage merit pay across the United States, education compensation reform is evolving through individual states that utilize merit pay such as Colorado, Texas, New Jersey, Missouri, Florida, Tennessee, Nevada, Idaho, Illinois, Indiana, and others that have passed state legislation linking teacher pay to student performance (Tienken, 2011).

Continuing to strive for increased student achievement, the United States federal government in 2006 started the Teacher Incentive Fund (TIF) that consisted of $99 million that states and districts could compete for if they implemented new forms of pay (Koppich, 2010; Liang & Akiba, 2011; Tryjankowski, et al., 2012). Federal legislatures claim that improving teacher compensation would improve the strategies in education, so
the Teacher Incentive Fund quadrupled to $437 million in 2010 (Koppich, 2010; Liang & Akiba, 2011; Springer & Gardner, 2010; Tryjankowski, et al., 2012). The Teacher Incentive Fund allowed states to compete for the funds that implement new forms of pay through allowing states to compensate teachers, principals, and school personnel for increased student achievement (Liang & Akiba, 2011; Tryjankowski, et al., 2012).

**Interest in Merit Pay by Political Leaders**

This interest in merit pay initiated many pilot programs relating to merit pay and student achievement (Liang & Akiba, 2011). Many states that do not have a strong union influence and where test data can be retrieved, such as Colorado, Minnesota, Idaho, and Mississippi, organized and implemented their own merit pay system in hopes that student achievement would follow (Goldhaber, DeArmond, Player, & Choi, 2008).

Therefore, the growing interest continues with political leaders to see what programs are beneficial in increasing student achievement and how they could motivate teachers (Goldhaber & Walch, 2012). Within the competitive marketplace, higher standards are expected, and in 2009, President Barack Obama and United States Secretary of Education Arne Duncan included performance pay in their goals because they felt that student performance was a necessity of teacher evaluation (Gratz, 2009b). Throughout President Obama’s administration, teacher pay has been evolving to include a variety of teacher pay options in order to improve teacher quality, accountability, and compensation through research based practices (Koppich, 2010; Slotnik, 2009).

There are many critics such as Adams, et al., (2009), Murnane and Cohen (1986), and Lavy (2007) who stated that using standardized test scores to evaluate teachers is not productive, which is how merit pay is measured. According to Gratz (2011),
“standardized tests affect roughly a third of all teachers, only measure a few subjects, and are often used for purposes they were not designed for, such as measuring individual student growth” (p. 158). Gratz discussed how comparing a school’s effectiveness to student achievement using standardized test scores can be less useful and counterproductive in the teaching and learning process. Since student growth can also be measured on social and emotional progress, improved creativity, and increased innovation test scores may not capture a student’s total growth (Bushaw and Gallup, 2008; Gratz, 2011; Rothstein and Jacobsen, 2006). According to Lavy (2007), “the quest to improve public education has led policymakers and researchers to focus on how to increase teachers’ effectiveness” (p. 88).

Money is one way to increase teachers’ effectiveness, according to Lavy (2007), because “teachers and schools appear to respond to monetary incentives by exerting more effort, applying more creativity, and modifying their pedagogical practices” (p. 102). Merit pay is one concept that “in keeping with the outcry for accountability and, if properly applied, might be the only realistic approach to improving the quality of education” (p. 249). Therefore, President Obama implemented another federal grant program in 2011 called the Teacher and Leader Innovation Fund “that would support the development and implementation of performance-oriented approaches to recruiting, retaining, and rewarding highly effective educators” (Springer & Gardner, 2010, p. 8).

However, “researchers to date have not found most performance-based teacher pay plans effective” (Hanushek & Rivkin, 2007, p. 82). Gratz (2009a) suggested that until the definition of student performance and teacher performance is solid and concrete, merit pay will not meet its highest potential and will hinder certain goals of school
districts. By implementing another grant, the federal government is trying to increase quality, accountability, and compensation for educators through a variety of merit-based incentives that differ in design and implementation (Kolbe & Strunk, 2012). Merit pay and federal grants such as RTT, TIF, and Teacher and Leader Innovation Fund are ways “in keeping with the outcry for accountability and, if properly applied, might be the only realistic approach to improving the quality of education” (Rebore, 2007, p. 249).

Types of Merit Pay Incentives

Merit pay incentives can be designed and implemented in a myriad of ways in order to meet the desired goal of increased student achievement. Although all types of merit pay incentives can help reach the intended goal, they each provide some type of enhanced teacher compensation that is given to teachers in addition to their base salary. Merit-based pay incentives can help to retain quality teachers, recruit quality teachers, or improve teaching strategies in a school district, school building, and school classroom (Kolbe & Strunk, 2012).

Market-Based Approach

A market-based approach to merit pay focuses on the market surrounding the school district and is mostly implemented in hard-to-staff areas, which are typically in economically disadvantaged areas or hard-to-staff subjects such as science and math (Gratz, 2011; Springer & Gardner, 2010). The extra pay that is provided in a market-based approach acknowledges the laws of supply and demand (Solmon, 2005). In these areas, stipends are used as incentives to recruit teachers who otherwise would not agree to teach in the economically disadvantaged area or hard-to-staff subject area (Gratz, 2011). Based on research conducted by Solmon (2005),
school administrators report that it is very difficult or impossible to fill elementary
teaching positions about 6 percent of the time, while positions in math, physical
sciences, and special education are difficult or impossible to fill more than 30
percent of the time. (p. 17)

Therefore, the market-based approach would enable school districts and administrators to
recruit teachers in the hard-to-staff areas. When teachers are not awarded for teaching in
hard-to-staff areas, “it is easy to understand why the best teachers may choose to teach in
the most rewarding and pleasant environment available” (Solomon, 2005, p.18). In
addition to providing pay incentives to teachers who agree to teach in these areas, schools
have long provided incentives to encourage teachers to take on extra responsibilities,
such as coaching or supervising extracurricular activities, which are considered part of
the market-based approach (Gratz, 2011). Besides market-based approach, group
rewards are another way to implement merit pay.

Group Rewards

Group rewards allow for a group of teachers to earn a nonrecurring bonus after
evidence that the students in the group improved on the assessment criteria (Kolbe &
Strunk, 2012). For example, when merit pay is based on group rewards, the group
performance determines “the total incentive payment, which is then divided among the
team members regardless of individual performance” (Lavy, 2007, p. 89). Teaching is a
multi-dimensional profession where all levels of teachers must work together in order for
success to be evident, so group rewards may work better when cooperation is seen
(Belfield & Heywood, 2008). Muralidharan and Sundararaman (2011) found that group
level rewards lead to increased student achievement and are popular among the teachers.
When rewarding a group of people for a successful outcome, group rewards promote teamwork and collaboration (Che & Yoo, 2001; Goodman & Turner, 2011; Gratz, 2011; Koppich, 2010; Springer et al., 2012). Furthermore, this approach reduces competition among teachers in that it encourages teachers to work together to improve student success. Ritter and Jensen (2010) agreed that group merit pay provides “strong incentives for individual teachers to collaborate by incorporating school-wide student performance growth into each teacher’s merit rating” (p. 37). Through working closer with colleagues, conflicts may be minimized, and teachers may encourage one another through new ideas and new teaching strategies, which could develop into a positive school culture (Goodman & Turner, 2011; Gratz, 2011). Belfield and Heywood (2008) confirmed that teachers working together increased the opportunity that a group reward would be earned.

While there seem to be many positive aspects of group rewards, a potential downfall to group rewards are the people who may be labeled as free riders (Solmon, 2005). Free riders are those professionals who do not contribute ideas, lesson plans, or time that results in the success of the team, but they receive the reward in the end (Goodman & Turner, 2011). According to Solmon (2005), free riders are teachers who are “ineffective teachers reaping benefits from the achievements of their more-effective colleagues” (p. 19). In a group with some free rider members, the teachers who are doing their best at increasing student achievement may become less motivated because the bonus depends on others (Goodman & Turner, 2011).

Free riders not only create tension in a group, but also negatively affect the allocation of funds (Springer et al., 2012). Milanowski (2007) found that teachers prefer
an individual award to a group award because of the free rider mentality in which they cannot control what a peer is going to contribute. Another negative effect on group rewards is that they offer weak incentives to some teachers who feel that they do not have an effect on the school-wide success (Sager, 2009). According to Goodman and Turner (2011), group merit-based incentives work best in smaller schools with fewer teachers who can provide encouragement and motivation, because the teachers form a closer relationship to their colleagues and work better cooperatively to reach the goal of moving students to the next level of knowledge. Therefore, a group incentive is more successful in a school that has a more cooperative, collaborating faculty (Goodman & Turner, 2011).

Another way group merit-based pay can be implemented is through rewarding teachers based on grade level success or subject level success. This allows smaller groups of teachers to work collaboratively with one another, mentor each other, and be responsible for the success of the entire group of students, not just their specific classroom (Springer et al., 2010). For example, if a team of five first grade teachers knew they were responsible for the success of every first grader at the school they may be more likely to share successful teaching strategies with one another to help the other students succeed as well as their own (Tryjankowski et al., 2012).

Success does not come unless expectations are set (Gratz, 2011). Therefore, when group rewards are given, as noted by Gratz, leaders must train teachers to set high objectives for the school year in order to see specific growth in each of the students. Some leaders believe that group rewards allow a positive change in school culture leading to a greater impact on student achievement (Gratz, 2011). In addition to setting high objectives so that teachers use the best practices, the monetary incentive must be
large enough to encourage altering teaching practices (Goodman & Turner, 2011). If the amount of money is not large enough, it may not motivate the teachers to reach the goal (Goodman & Turner, 2011).

**Individual Rewards**

In addition to group rewards, individual rewards are a way to use the merit pay system in rewarding individual teachers, rather than groups of teachers (Adams et al., 2009). When rewarding an individual teacher, Lavy (2007) believed that the individual reward encourages better leadership and monitoring teachers for quality work. Merit pay rewards are based on value added measures, which are basing teacher performance on student test scores and, according to Rebore (2007), “value-added measures, in particular, are more appropriate for measuring individual teacher effectiveness and ensuring fair ranking” (p. 101). According to Adams, et al. (2009), the sophistication to accurately measure an individual teacher’s effectiveness has improved, making the individual reward more effective for evaluating teacher success in the classroom.

If teacher effectiveness can be accurately measured, Lavy (2007) believed that the individual rewards give a greater incentive for teachers to do what is right; however, Gratz (2011) stated that this also causes competition between teachers when a ranking system is created. Glewwe, et al. (2010) agreed with Gratz (2011) in that “individual-level teacher incentives might undermine cooperation within schools” (p. 224). However, according to Muralidharan and Sundararaman (2011), “the way an incentive program is designed and framed can influence its effectiveness as well as teacher opinions” (p. 396).
A Case for Merit Pay

Merit pay for teachers has been supported by countries such as the United States that offer programs to states that are willing to link teacher pay to student performance (Springer & Gardner, 2010; Tienken, 2011). Through the support of politicians, interest in merit pay continues to increase (Lavy, 2007). The Denver ProComp program, which will be discussed in further detail later in the chapter, is an example of a successful program that strengthens the case for merit pay. Researchers such as Woessmann (2011b) found that students who are educated in countries that use performance pay score significantly higher in math, science, and reading. These results have encouraged leaders in education to use “performance pay as a catalyst for fundamentally changing how they do business” (Gratz, 2009, p. 79).

There are four major areas that are found in which a strong case for merit pay is created (Greenlee, 2009; Lavy, 2007; Liang & Akiba, 2011; Woessmann, 2011b). In one area, merit pay can increase student performance (Woessmann, 2011b) and in another area merit pay can help teachers increase their intrinsic motivation (Liang & Akiba, 2011). In addition to these two findings, the third area, Greenlee (2009) and Lavy (2007) considered merit pay to be a positive impact in recruiting and retaining more teachers. The fourth area that creates a case for merit pay is the increase in teachers’ accountability and productivity (Hess, 2010). If merit pay is implemented correctly, it has the potential to create a more successful education landscape by “motivating teachers to improve learning and adequately linking instruction to student learning, so that teachers can be financially rewarded accordingly” (Caillier, 2010, p. 59).
Increased Student Performance

Most teachers value student success as well as finding a variety of avenues in which to create a greater amount of success for each individual student. Merit pay is just one way in which Lavy (2007) found that “research evidence suggests, although not conclusively, that pay-for performance incentive can improve teachers’ performance” (p. 100), thereby improving student performance. Teacher performance in the classroom is important due to the fact that “substantial research evidence suggests that well-prepared, capable teachers have the largest impact on student learning” (Hammond, 2003, p. 7). Liang and Akiba (2011) also agreed “that teachers play a critical role in improving student achievement” (p. 845). Therefore, if teacher pay can be linked to student performance it can give great insight into what the teacher values in the classroom and what the teacher does not value in the classroom (Lavy, 2007). In order to increase student performance, teacher performance must be increased, as Lavy found through research completed internationally, which showed merit pay had positive effects on student performance when it was given for teachers to increase classroom performance. For example, when Lavy “evaluated two carefully designed programs in Israel and found significant gains in student and teacher performance” (p. 87) a stronger case for merit pay was created.

Professionals in other careers besides teaching are rewarded for reaching, or exceeding, the goals of the organization (Solmon, 2005). Subsequently, just as other careers reward exceptional work, Solmon agreed that “teachers should be rewarded for producing useful student outcomes, most notably, student learning gains, measured by improvement rather than by levels of achievement at the end of a course” (p. 19).
Donlevy (2008) also agreed that “many businesses compensate employees handsomely, beyond the regular salary, when certain performance targets are met. If agreed-upon goals are reached, bonuses are triggered, adding to wages earned” (p. 245). Adams, et al. (2009) believed that the public school system can be managed similar to that of a private business if successful teachers are rewarded with monetary incentives when student performance increases.

*Increased Intrinsic Motivation*

Most teachers enter the field of education out of a passion for helping students succeed, which is motivated by the intrinsic desire to reach a goal of student success (Gratz, 2009b). Therefore, “intrinsic compensation is a reward that the employee receives from doing the job itself” (Rebore, 2007, p. 250). In order for merit pay to be effective, Rebore (2007) said that the program must incorporate intrinsic motivation. A merit pay program that is designed with fair, transparent, and measurable goals, Muralidharan and Sundararaman (2011) said, will increase a teacher’s intrinsic motivation. When a teacher’s intrinsic motivation is increased, the teaching practices inside the classroom will improve as well (Springer et al., 2012).

According to Morey (2008), merit pay will not only increase the teaching practices, it will also help encourage teachers to reflect on their teaching practices to better assess the ones that are beneficial to student growth, and those practices that should no longer be used. While reflecting about the techniques that should be used in the classroom, responsibility and ownership of the teacher’s personal growth is increasing and promoting student achievement (Gratz, 2009b; Morey, 2008). Intrinsic motivation
correlates with job satisfaction; therefore, when teachers are satisfied with their job they may be more willing to remain at the job.

Recruits and Retains More Teachers

Even though teachers have a strong intrinsic motivation to see students succeed (Lavy, 2007), merit pay can be a catalyst to attract more qualified teachers into the field of education (Hess, 2010-2011). According to Rebore (2007), “the main purpose for establishing a compensation policy is to attract and retain qualified employees who will provide the type of service expected by the public” (p. 244). Greenlee and Brown (2009) found that for 57% of teachers, salary enhancements or monetary incentives were important. Ritter and Jensen (2010) stated that merit pay can “properly align incentives or teachers so the most talented are recruited, the best are rewarded, and the laggards are relocated to a different profession” (p. 32). With more talented teachers leading the classroom instruction, more talented students will be produced (Coleman et al., 1966; Goldhaber, 2002; Lavy, 2007; Nye, Konstantopoulos, & Hedges, 2004; Rivkin, Hanushek, & Kain, 2005).

Teacher turnover interrupts the school climate and becomes financially draining to a school district due to the fact that new teachers must be trained (Glazerman & Seifullah, 2012). Therefore, if a school district uses merit pay as a way to retain teachers, the successful teachers who are in high demand will have more opportunities to earn more money and may stay in the school district for a longer time period (Liang & Akiba, 2011). Clabaugh (2009) also agreed that if the “most skilled teachers will make more money they will stick with the job” (p. 17) and increasing the number of teachers who will remain in the school district. Although merit pay is utilized to retain teachers, it can
also be effectively used to encourage poor performing teachers, through accountability, to leave the profession (Lavy, 2007).

**Encourages More Accountability and Productivity**

According to Lavy (2007), when teachers are held accountable for achieving goals, the productivity in the classroom will increase and therefore student achievement will increase as well. The field of education contains many complex goals that sometimes cannot be defined. However, stakeholders are concerned with how much productivity a teacher has in the classroom; therefore merit pay can provide an incentive that could hold teachers accountable and encourage greater productivity (Hess, 2010-2011). Researchers such as Solmon (2005) pointed out that “there are few careers, except teaching, in which professionals are not held accountable for their failures and rewarded for their accomplishments” (p. 18). One value that merit pay has is holding teachers accountable for reaching personal, school, and district goals, which would benefit both the teachers and students (Gratz, 2009b). When teachers are held accountable, a teacher’s productivity in the classroom often increases (Lavy, 2007).

A teacher’s instruction is a direct link to a student’s performance (Rebore, 2007); therefore, merit pay may provide the incentive needed to increase the productivity of teachers in the classroom (Rebore, 2007). When a monetary reward is offered, the productivity of the worker will increase because the worker is trying harder to meet the objectives that will earn the additional pay (Clabaugh, 2009; Podgursky & Springer, 2007). Rebore (2007) believed that “there is a direct link between incentive rewards and the quality of performance” (p. 252). One area that school districts must be aware of when rewarding merit pay is that quantity is not compensated over quality (Rebore,
Quality productivity comes when teachers are collaborating and developing goals together to better each individual classroom (Tryjankowski, et al., 2012). Educational human resource leader Rebore (2007) also agreed that merit pay will encourage teachers to assume more responsibility and improve their performance. Although merit pay can be beneficial to areas in education, it can also have negative effects to education and the environment students are learning through (Clabaugh, 2009; Lavy, 2007).

A Case Against Merit Pay

A school should strive to meet the needs of each individual student so that they can be successful “as citizens, workers, or members of families and communities” (Gratz, 2009a, p. 40). Whereas Hess (2010-2011) states that merit pay causes an “overreliance on value-added measurements” (p. 53) solely focusing on reading and math scores for grading how effective the teacher was in the classroom, while ignoring the other aspects of education. When focusing on the value added measures, or test scores, teachers may begin to turn against each other in a profession where collegiality is needed to increase student achievement (Morey, 2008). Merit pay could negatively affect areas in education such as the school culture, the test, teacher effectiveness, and teacher motivation (Bushaw & Gallup, 2008; Gratz, 2011; Lavy, 2007; Springer et al., 2012).

Harms the School Culture

When merit pay is introduced in a school it has the potential to cause negative effects to the school culture regarding cooperation between the teachers (Gratz, 2011; Lavy, 2007). The decrease in cooperation stems from the competitiveness of merit pay, because teachers may feel that they must outperform their peers in order to receive the reward (Clabaugh, 2009; Donlevy, 2008). Ritter and Jensen (2010) stated that this unfair
competition causes “educators who would otherwise seek fruitful collaboration” (p. 32) to keep the effective teaching strategies to themselves.

If only some teachers are rewarded with merit pay, Tryjankowski, et al. (2012) believed that during the school year teachers will hesitate to help other teachers with improving teaching strategies. Several researchers agreed that merit pay reduces cooperation and puts teachers against teachers (Goldhaber, DeArmon, & Deburgomaster, 2011; Gratz, 2011; Morey, 2008; Murnane & Cohen, 1986). Putting teachers against teachers, Lavy (2007) explained causes “negative effects on motivation and collegiality” (p. 92).

The reduction in collegiality causes a reduction in the morale of teachers as well (Belfield & Heywood, 2008; Murnane & Cohen, 1986; Springer et al., 2012). Due to a teacher’s morale decreasing through the use of merit pay, a teacher’s intrinsic reward desire may decrease because the passion for teaching is no longer held (Springer et al., 2012). Lavy (2007) said that teachers enter the profession because they love seeing students succeed and that merit pay undermines the passion that motivates the teacher to come to work. The success of a child may not be solely determined by his or her success on a standardized test; therefore, educators often discuss how important it is to create a culture that nurtures the whole child (Lavy, 2007). If teachers have to solely focus on measures that are being rewarded by merit pay, Lavy stated, other important aspects such as interpersonal skills, innovation, and critical thinking are not going to take place (Gratz, 2009a). If stakeholders believe that education is not only about the test, implementing merit pay may be counterproductive and could create an over-emphasis on standardized testing (Tryjankowski et al., 2012).
Test taking is not the only strategy and skill that students learn in school. As Gratz (2009a) stated, “many districts still list such goals as creating life-long learners, providing students with the skills they need to succeed, and helping each child discover his or her talents and abilities” (p. 40) in their mission and vision statements. Researchers Bushaw and Gallup (2008), Gratz (2011), and Rothstein and Jacobsen (2006) found that community members, parents, teachers, and school districts are interested in more than just test taking strategies. Another researcher, Solmon (2005), stated that schools are “to develop students’ social behavior, career preparation, and positive attitudes” (p. 19). Stakeholders are looking for schools to encourage and mold students to become better citizens, to grow socially and emotionally, and to discover their talents (Rothstein & Jacobsen, 2006). Merit pay steers the focus from teaching the whole child to more pressure on taking a test and learning the strategies to perform well on the tests (Clabaugh, 2009).

Most teachers, when given a challenge such as merit pay, will do everything they can to reach the goal, even if it means concentrating more time on what is measured and ignoring everything else (Adams et al., 2009). When Tryjankowski et al. (2012) discussed merit pay they stated that, “if the wider goal of education is to encourage all children to reach their potential, then merit pay systems based solely on test scores may provide incentives for teachers to focus away from this broader goal” (p. 197). Murnane and Cohen (1986) also believed that focusing on performance pay will leave out other important issues that need to be covered during the school year.
However, if merit pay is introduced, teaching to the test may become more prevalent in schools, leaving creativity and nurturing the child during developmental years out of the educational process (Lavy, 2007; Murnane & Cohen, 1986). The achievement tests given to students are not the basis of a student’s knowledge, but merely a small piece of a very large puzzle (Adams et al., 2009). Merit pay may place more emphasis on areas such as testing while leaving out other important issues that need to be covered (Murnane & Cohen, 1986). Due to the many aspects of teaching, such as social and emotional skills, critical thinking skills, and innovation, the teaching profession is very difficult to measure and assess fairly (Lavy, 2007; Murnane & Cohen, 1986; Rotherham & Willingham, 2009).

**Difficult to Measure**

There is more to teaching than a test. Liang and Akiba (2011) discussed how teaching is a multi-dimensional profession, while Clabaugh (2009) said, “the full scope of a teacher’s actual job performance is notoriously opaque” (p. 17), making the evaluation used in determining a teacher’s merit pay seem inaccurate. Teaching is “generally complex, unique, and often results from team efforts, with any one teacher’s effort difficult to disentangle from that of the others on the team” (Lavy, 2007, p. 88). As discussed earlier, teaching is a collaborative job where many teachers might encourage, teach, and help one student to succeed; therefore, it is challenging to pinpoint which teacher deserves the credit (Lavy, 2007).

According to Springer and Gardner (2010), merit pay fails because it is difficult to measure teachers’ output in a valid, reliable, and fair way. When “evaluating progress toward the goal fairly and accurately is problematic” (Lavy, 2007, p. 91), merit pay may
cause negative effects between the teachers who are expected to use the program. When an entire school district implements a merit pay program, they might have schools where the culture is vastly different from one another, creating an unfair evaluation due to the fact that every child is different (Gratz, 2009a). Gratz (2011) stated, “while there are well-known and observable attributes of good teaching, students and school conditions vary from one community, school, and classroom to the next” (p. 159). It is difficult to combine merit pay and education due to the fact that teaching is a complex profession made up of many areas that cannot be measured, making it difficult to evaluate (Murnane & Cohen, 1986). Not only is the teaching profession difficult to evaluate causing merit pay to become inaccurate, teachers are also not motivated by financial rewards (Hanushek & Rivken, 2007; Murnane & Cohen, 1986).

**Does Not Motivate Teachers**

Teachers enter the profession with a passion and desire to see students learn (Tryjankowski et al., 2012). “To believe that teachers will try harder if offered a financial incentive is to assume that they aren’t trying hard now, that they know what to do but simply aren’t doing it” (Gratz, 2009a, p. 40). The teachers who are passionate about their students will teach using the best strategies they know and financial rewards are not going to motivate them to change (Gratz, 2011; Lavy, 2007). Since teachers go into the field as passionate educators, they may find the merit pay financial reward system insulting (Gratz, 2009a). In a survey, Hanushek and Rivken (2007) found that teachers are not highly motivated by money, but by positive work conditions that create an enjoyable atmosphere. Therefore, “if other factors serve to motivate teachers more,
then monetary inducements alone will not maximize each teacher’s instructional potential” (Hanushek & Rivken, 2007, p. 70).

Each teacher is in a different stage in life, some young and some ready to retire; therefore, “not all individuals value the same type of compensation” (Rebore, 2007, p. 243). Due to the fact that each teacher will process the merit pay method differently, it has the potential to create resentment between the teachers and decrease the loyalty that they have with each other (Lavy, 2007). Therefore, according to Gratz (2009b) and Gratz (2011), merit pay will not produce results and it will not change the teaching style of teachers. Also, Lavy (2007) stated that merit pay demoralizes teachers by using financial rewards and reduces the teachers’ motivation, which may not increase the student achievement in a classroom. Researcher Rebore (2007) asked, “‘does money stimulate an employee to put forth more effort?’ The answer to this question is closely related to individual needs, because money in itself is rarely an end but rather a means to ‘purchasing an end’” (p. 252).

Why Merit Pay Works

There are consequences of merit pay and benefits of merit pay as seen in the previous section. However, when merit pay programs have been implemented carefully in a sensible and thoughtful manner they showed a growth in student achievement (Ritter & Jensen, 2010). According to Woessmann (2011b), “student achievement is significantly higher in countries that make use of teacher performance pay than in countries that do not use it” (p. 75), especially in the subjects of math, reading, and science. In order to receive the most out of the merit pay program, it must be created carefully in order to develop conditions that will foster the anticipated effects improving
the school culture and attaining the student achievement growth that is desired (Marsh & McCaffrey, 2012). Ritter and Jensen (2010) expressed, “when done correctly, merit pay programs can do more than just reward teachers for excellent work. They can also result in a more collaborative, student-focused, learning environment” (p. 37).

**Key Components of Successful Models**

Merit pay has been implemented successfully in many school districts in the United States and around the world (Goldhaber & Walch, 2012; Lavy, 2007). For example, successful merit pay programs have been conducted in Denver, Colorado, Little Rock, Arkansas, and the country of Israel where key components were found in the implementation of the program that drove the success. As was seen through these successful programs, if merit pay is going to be applied to existing salary scales, there are ways that it needs to be executed in order for it to be done correctly and successfully. The areas that must be acknowledged when planning a merit pay program are the mission of the district, the employee acceptability or buy-in, the understanding of the program by the employees, a belief that the system is fair and it is possible to reach the award, and finally that the reward is valuable.

**Mission focused.** First and foremost, the educational mission must be the main focus when implementing a merit pay program (Slotnik, 2009), which may be the reason Rebore (2007) suggested that merit pay needs to be linked to what the school district finds desirable in its schools. Tryjankowski et al. (2012) said that the program must be “sufficiently aligned with the goals of the organization so that any changes in behavior are reflective of those goals” (p. 197). Therefore, when the merit-based pay is implemented the change that takes place will reflect the district’s goals and be linked to
student achievement (Slotnik, 2009). When the brainstorming begins, stakeholders should be involved in order to make sure that the merit pay plan is connected to the mission of the district (Slotnik, 2009). Thus, according to Slotnik, when change does happen it will continue to build on the school district philosophy that is written within their mission statement.

Employee acceptability and buy in. In addition to aligning the merit-based pay program to the mission, another important factor is employee acceptability or employee buy-in to the program (Marsh & McCaffrey, 2011; Milkovich & Newman, 1990; Tryjankowski et al., 2012). The team that is formed to create the system, as Slotnik (2009) discussed, must be made up of all stakeholders including the principals, teachers, parents, and community members to help strengthen the program and provide useful resources. When all stakeholders are represented, they become engaged and involved in the process, therefore maximum buy-in is created (Tryjankowski et al., 2012).

Furthermore, greater satisfaction comes when teachers participate in the policymaking process while a merit pay system is being developed (Rebore, 2007). Ritter and Jensen (2010) found that after including the teachers in the planning process, details were corrected that did not make sense, in order for the program to run more smoothly. The work done before implementation will help “describe the goals of the merit pay program and even modify program details to gain support by teachers and staff” (Ritter & Jensen, 2010, p. 35). Since teachers are the people who merit pay will affect most, it is important to get them involved in the planning process, which will allow trust and collaboration to build before the program is implemented in its entirety (Ritter & Jensen, 2010; Tryjankowski et al., 2012).
The trust that is built between the stakeholders and the school district through the engagement of the merit pay planning process enables the teachers, who will be most effected by the change, to feel ownership of the change taking place and will be more supportive when the change is executed (Slotnik, 2009). When staff members are involved in the development of the program, greater buy-in from the employees will be created (Rebore, 2007). Due to the fact that the teachers are directly involved in the planning process, they will feel less threatened if they are involved in organizing the merit pay program (Tryjankowski et al., 2012) and, as Slotnik (2009) has stated, changes must be “done with the teacher, not to them” (p. 32) in order for the change to take place smoothly and successfully. According to Rebore (2007), “a performance incentives system will be ineffective unless it has…teacher acceptance and satisfaction” (p. 245).

Participants must understand the program. Although the employees’ acceptability and buy-in is a critical component (Milkovich & Newman, 1990), it is essential that employees understand the program and have confidence in the program that they are going to be using (Rebore, 2007). According to Tryjankowski et al. (2012), teachers need to know exactly what to do to achieve the goals of the merit pay system.

Therefore, “goals within the system must be communicated to all members of the school community to ensure a common understanding” (Tryjankowski et al., 2012, p. 213). For example, Marsh and McCaffrey (2012) stated that “key elements including targets their school needed to reach, bonus amounts, and how committees decide to distribute awards” (p. 54) should be presented and understood. In addition to setting reachable targets, Ritter and Jensen (2010) state that the “reward should be transparent, understandable, and thoroughly explained to teachers before program implementation”
There are also many age groups in the teaching profession and Goldhaber et al. (2011) suggested making the merit pay program optional for the older teachers close to retirement and mandatory for the younger teacher generations who can accept change easier, which will ensure the common understanding needed for a successful program.

**Believe the system is fair and provide a reachable award.** When implementing a merit pay system, Marsh and McCaffrey (2012) stated, “educators must perceive that teachers, staff, and schools will be treated fairly” (p. 54). Tryjankowski et al. (2012) thought that all teachers, no matter what position they hold, should get a pay increase of some size, making the bonus payout fair for teachers who teach tested subject areas and those who do not teach tested subject areas, such as music or physical education. For example, the Charter School for Applied Technology in Kenmore, New York, guarantees that all teachers have the ability to earn a maximum of 7% salary increase, so the teachers are not competing with each other over the money and teachers can expect a fair outcome (Tryjankowski et al., 2012). Moreover, making sure that there is “objectivity and consistency in applying assessment measures” (Rebore, 2007, p. 245) will better create a fair merit pay system. Without objectivity and consistency, morale could decrease if teachers declare the merit pay system unfair (Rebore, 2007).

Not only does the system need to be considered fair by the teachers, but the “goals should be attainable” (Lavy, 2007, p. 87). When goals are based on measurable outcomes, teachers can easily understand what needs to be done to achieve the goal and receive the bonus (Tryjankowski et al., 2012). Ritter and Jensen (2010) agreed that, “if merit pay programs are going to be successful, a teacher’s reward should be based on realistic goals” (p. 35) that can be reached by the teacher. If the merit pay system is
considered unfair and does not provide reachable goals, an atmosphere might be created “where employees perceive inequality, quality of performance may diminish, absenteeism may increase, and resignations may even rise” (Rebore, 2007, p. 255).

*Find the reward valuable enough to achieve it.* In order for the employee to react to the pay incentive, Tryjankowski et al. (2012) said that the “employee has to be motivated by pay, which means that the bonus or increase needs to be substantial enough to motivate teachers to change their behavior” (p. 196). Administrators should understand the needs of their employees in order to interpret their needs, making sure that the reward would be valuable enough for the employee (Rebore, 2007). If teachers accept that the reward will satisfy their own needs, they could be more inclined to achieve the goal (Rebore, 2007). Liang and Akiba (2011) also agreed that finances need to be “substantial and attractive so that programs can be more effective” (p. 853). Due to the fact that the monetary value must be a significant amount to motivate the teacher, Goldhaber et al., (2008) said that a merit pay system is more likely going to be used in wealthier school districts.

**Successful Models**

*Denver, Colorado ProComp Plan.* In 1999 the Denver, Colorado, Public School District piloted a merit pay system that connected teacher pay to student achievement (Gratz, 2009b). It was so successful that in November 2005 the citizens of Denver voted for a $24 million tax increase to fund the merit pay program that rewards teachers at the elementary and secondary school levels (Goldhaber et al., 2008; Lavy, 2007). Many components of the plan, such as focusing on the school district mission, teacher created objectives, stakeholder buy-in, and a volunteer portion to participate are some of the
reasons that the Denver ProComp Plan was successful (Goldhaber & Walch, 2012; Gratz, 2011).

Mission minded, Denver created each component of the merit pay plan around their mission of creating a culture focused on student learning (Slotnik, 2009). Who better to set goals around student learning than the classroom teachers; who through the Denver ProComp Plan have been able to set their own goals and objectives for the students to meet (Gratz, 2009b). Not only was this plan mission minded, it is evident from the tax increase vote that this plan was supported by the majority of the stakeholders, from the community members to the teachers, involved in the Denver Public School District, which is one of the key components of a successful merit pay program (Gratz, 2011; Gratz 2009b; Slotnik, 2009). Goldhaber and Walch (2012) found that another reason the merit pay plan was so successful was the volunteer portion of the plan where the teachers were given the opportunity to participate or not participate. The teachers could participate in four various areas defined by the plan that included an increased knowledge of the profession, a comprehensive professional evaluation, market incentives, and a student growth factor (Goldhaber & Walch, 2012).

Through the plan many bonuses could be earned. One area that would reward a 9% bonus was obtaining an increase in knowledge, which was documented by a teacher who had earned an advanced degree in the field of education (Goldhaber & Walch, 2012). The second area was a comprehensive professional evaluation conducted by the school-level administrator and, if the evaluation was successful, a 1-3% bonus could be awarded (Goldhaber et al., 2008; Goldhaber & Walch, 2012). The market incentives are another type of merit pay bonus that Goldhaber et al. reported the Denver ProComp Plan
uses in order to give bonuses to those teachers who were willing to teach in hard-to-serve areas of the Denver Public School District. Most importantly, and the culminating factor in the Denver ProComp Plan, was a 6.4% bonus for teaching in a school that showed student growth (Goldhaber et al., 2008; Goldhaber & Walch, 2012). Due to the fact that The Denver ProComp Plan was created with the key components of a successful merit pay plan, Goldhaber and Walch (2012) reported that significant student gains were seen throughout the school district and the teachers became much more effective educators.

**Little Rock, Arkansas Achievement Challenge Project.** A pilot program called the Achievement Challenge Pilot Project was conducted in the Little Rock Public School District from 2004 to 2007 in an effort to find out if a teacher’s productivity would impact student test scores (Winters, Green, Ritter, & Marsh, 2008; Weldon, 2011). The program was implemented in five disadvantaged elementary schools where the teachers had the opportunity to earn a maximum total of $11,000 if their students were successful on the state tests (Weldon, 2011). It was further explained by Winters et al. (2008) that teachers would be awarded $50 per student if the student showed a 0-4% growth, $100 per student if the student showed a 5-9% growth, $200 per student if the student showed a 10-14% growth, and $400 per student if the student showed a 15% growth.

Winters et al. (2008) and Weldon (2011) found that students taught by teachers who were eligible for the bonus scored higher on the state tests in all core subject areas as opposed to those students taught by teachers not eligible for the bonus. Winters et al. further explained that the bonus was seen to be most effective with those teachers who were considered to be the least effective when the program started. If the low-performing teachers were able to increase test scores of low-performing students, according to
Winters et al., then performance pay programs have the potential to improve student achievement as well as teacher productivity thereby reducing the achievement gap (Winters et al., 2008). When Winters et al. reported the data, they stated that the authors controlled for student characteristics in order to determine if real student gains took place. According to Winters et al., “performance pay may be an effective strategy not just for improving overall achievement, but more particularly for closing the achievement gap” (p. 2).

*Israel Teacher Incentive Experiment.* Lavy (2007) considered the merit pay program in Israel to be one of the stronger examples of a merit-based bonus program. The program began in 1995 and was a competition between high school teachers to see which teacher could rank the highest based on the students’ average math, Hebrew, and English test scores (Lavy, 2004). Reducing the dropout rate and improving student achievement were the two main goals of the Israeli merit pay program (Lavy, 2007). Lavy discussed that the program was a cross between a school-wide bonus program and an individual bonus program due to the fact that the school was awarded a monetary award for reaching the program goals. Lavy explained that out of the award earned by the school, 75% was used by the school as a whole, and 25% of the award was divided up between the teachers who earned the award. The award amount the teachers received was equivalent to 1 to 3% of the average teacher’s salary (Lavy, 2007).

After 2 years of implementing the Israel merit pay program, Lavy (2007) “found significant gains in student performance” (p. 97) as well as a decline in the dropout rate allowing more students to actually take the graduation test. Lavy (2004) stated that the result of the program “indicates clearly that pay-for-performance incentives can align the
interests of school teachers with the interest of the school system without inducing behavior distortions such as test score manipulations or primarily teaching to test practices by teachers” (p. 31).

Why Merit Pay Does Not Work

Merit pay programs have been implemented successfully as seen in the Denver ProComp, the Little Rock Achievement Challenge, and the Israel Model; however, there are also some programs that were not successful and show no evidence that merit pay models work effectively in a school setting (Adams et al., 2010; Springer et al., 2010). Some researchers such as Donlevy (2008) are strongly against the merit pay systems due to merit pay clouding the judgment of the teachers and working against the best interest of the children they are affecting. When a teacher’s judgment is clouded, he or she will begin focusing on what is being measured even though it goes against the education mission that the school district finds most valuable; therefore, the teachers begin gaming the system to reach the merit pay goal (Adams et al., 2010). Another negative impact shared by Donlevy (2008) is that merit pay “forces concentration on test scores when other things might really need priority attention in particular schools” (p. 246). Some educational systems in the United States and internationally such as Chicago Public Schools in Illinois, New York City Public Schools in New York, Nashville Public Schools in Tennessee, and Kenya Ministry of Education in Africa found that a merit pay system had a negative effect on the students, the staff, and the schools.

Unsuccessful Models

Chicago’s Teacher Advancement Program (TAP). The Teacher Advancement Program (TAP) was developed in the 1990s by the Milken Family Foundation to provide
deserving teachers extra pay if they met the established criteria by the end of the school year (Glazerman & Seifullah, 2012; Solmon, 2005). According to Solmon (2005), “the TAP is a systemic reform of public schools intended to attract, motivate, develop, and retain high-quality talent in the teaching profession” (p. 18). The main idea behind the TAP program, as described by Glazerman and Seifullah (2012), is that when the TAP program is implemented, school districts will be able to give teachers monetary incentives that will help retain and attract talented educators and help raise student achievement through improved instruction and consistency.

When the Chicago Public Schools decided to implement a TAP program they adapted it from the original TAP program created by the Milken Family Foundation and did not include a value added measure for individual teachers; therefore, the Chicago TAP program was a group merit pay incentive (Glazerman & Seifullah, 2012). Throughout the 40 high-needs schools that TAP was implemented in, there was no evidence that the group merit pay incentive increased student test scores, had an impact on teacher retention, or had an impact on positively changing the school climate (Glazerman & Seifullah, 2012). Glazerman and Seifullah (2012) concluded that the Chicago TAP program was unsuccessful in the implementation of the merit pay system.

*New York City’s Performance Bonus Program.* In November 2007 the New York City’s Department of Education School Wide Performance Bonus Program was implemented with 200 low-performing schools that were considered eligible based on student test scores (Goodman & Turner, 2011; Koppich, 2010; USDE, 2012). The comparison group, that was not eligible for the merit pay incentive, consisted of 128 schools (USDE, 2012). As stated by Goodman and Turner (2011), in order to receive a
merit pay bonus, the schools must set and reach school-wide goals that corresponded with the New York City accountability system. The accountability system awards “letter grades to schools based on student achievement on state reading and math exams, yearly student progress, and measures of the learning environment” (USDE, 2012, p. 1). When and if the goals of the accountability system are reached, teachers are awarded bonuses based on the overall school-wide student test average (Goodman & Turner, 2011).

Teachers participating in the program are awarded $3,000 each if the school meets the student achievement target or $1,500 if the school reaches at least 75% of the school goals, which is a 3% - 7% salary increase depending on the number of years the teacher has been teaching (Goodman & Turner, 2011; Koppich, 2010; USDE, 2012). Schools were given discretion over how the money for the awards was divided up between the teachers and most schools chose to divide the money equally between the teachers who met the goals (Goodman & Turner, 2001). Goodman and Turner (2011) noted “these bonuses provided a substantial monetary benefit to most recipients” (p. 69).

Even though the incentive was high in monetary payout, which was a key component of success, to the teachers of the New York City School Wide Performance Bonus Program, the incentive still did not result in increased student achievement (USDE, 2012). According to the USDE (2012), the “school-wide teacher performance bonus program did not have a statistically significant effect on students’ reading achievement” (p. 2) or “on mathematics achievement” (p. 2). Goodman and Turner (2011) also pointed out that school-wide bonus programs that place “a heavy reliance on school-wide rewards may hamper the effectiveness of merit pay programs in schools with large teaching staffs that are not highly collaborative” (p. 71).
Nashville’s Project on Incentives in Teaching (POINT). The Project on Incentives in Teaching (POINT) project in Nashville, Tennessee, was a 3-year study conducted with 300 middle school math teachers; half of the teachers were placed in the treatment group who were eligible for the bonus and the other half were placed in the control group and not eligible for the bonus (Springer et al., 2010; Springer & Gardner, 2010; Weldon, 2011). According to Springer et al. (2010), “to receive this bonus, a teacher’s students had to perform at a level that historically had been reached by only the top 5% of middle school math teachers in a given year” (p. xi). Koppich (2010) explained that each teacher participant volunteered to be a part of the study, and the teachers in the treatment group had the possibility to earn a $15,000 bonus each year in addition to their salary if teachers were able to show an increase in student test scores. It was up to the teachers to decide what was needed to improve the test scores, whether it was attending more professional development, asking other teachers for advice, or becoming more creative in their teaching strategies (Springer et al., 2010).

Springer et al. (2010) stated that the Nashville POINT system was to, “test the notion that rewarding teachers for improved scores would cause scores to rise” (p. xi). Authors Springer et al., of the study found results that concluded student performance would not increase if teachers were awarded large sums of monetary incentives. Although teachers were not competing against each other for the bonus awards, Springer et al. (2010) concluded that overall teachers did not support the program, motivation did not increase among the teachers, and student achievement did not increase when a substantial amount of money was offered as a merit pay bonus.
Kenya International Child Support (ICS) Model. Researchers Glewwe et al., (2010) reported that the merit pay program that was implemented in 50 primary schools across the Kenyan Ministry of Education from the years 1996 to 2000 “had little or no effect on broad measures of human capital” (p. 224). The teachers who were involved in the merit pay study were eligible for a bonus that equaled 21% to 43% of their monthly salary if their student test scores increased by the end of the school year (Lavy, 2007). However, since monetary bonuses were not culturally acceptable 83% of the teachers said that prizes such as kitchen accessories, business suits, tea sets, and bed linens were equitable bonuses to give out for teachers who were successful in increasing student performance (Glewwe et al., 2010). Not only was the program supposed to increase student achievement, the Kenyan Ministry of Education also wanted to promote teacher cooperation as another goal of the program so prizes were awarded based on the average school-wide performance (Glewwe et al., 2010; Lavy, 2007).

Lavy (2007) reported that there were significant gains in student performance during the years the merit pay program was implemented. However, the gains reported by Glewwe et al., (2010) were only seen on the multiple choice test questions showing that students did not gain a deep knowledge of the curriculum, but instead learned test taking strategies to show an increase on the end of the year standardized tests. Lavy (2007) explained that these results show “teachers focused on improving short term rather than longer term learning” (p. 98), and more test prep sessions were given inside and outside of school hours. Once the 2-year time period for the program was complete and no more money was available for awards, the teachers reverted back to their old teaching habits and behaviors (Glewwe et al., 2010).
Summary

Through the literature it is evident that the implementation of merit pay is not yet understood. Although there are researchers and school districts that have successfully implemented merit pay with the end result of seeing student achievement increase, on the contrary, there are those researchers and school districts that have seen the reverse effect using merit pay as a motivator. As Pink (2009) explained, motivation is an internal factor. However, if monetary incentives can trigger internal motivation then merit pay could be that motivator that some schools need to increase student achievement.

The literature review details the compensation history of the teaching profession, in addition to the history of merit pay. History sheds light on the fact that merit pay has been around for many years and it is not going away. Merit pay began in the mid-1800s when Britain paid teachers based on performance (Gratz, 2009); then, merit pay is seen in the 2000s when President Obama implemented the Teacher and Leader Innovation Fund to encourage various ways to pay successful teachers (Gratz, 2009). In addition to the many programs that have been implemented in government, there have been researchers and school districts that have tried merit pay to motivate teachers.

Those that have tried and succeeded with merit pay as a motivator found that it could increase student performance and give great insight into what is valued and what is not (Lavy, 2007). Due to more teachers reflecting on improved teaching strategies and what they value in their classroom, intrinsic motivation could increase (Morey, 2008; Muralidharan & Sundararaman, 2011). Two other areas where the literature showed merit pay resulted in change are the recruiting and retaining of teachers as well as an increase in teacher accountability and productivity (Greenlee & Brown, 2009; Hess,
2010-2011). Throughout the literature, there were also researchers and school districts that found merit pay did not improve student achievement and that it actually harmed the school culture (Murnane & Cohen, 1986; Springer et al., 2012). Not only did merit pay harm the school culture, Bushaw and Gallup (2008) also found that school is not all about taking tests and that merit pay hinders the creativity a child needs to grow. In addition, Lavy (2007) found that teaching is a difficult profession to measure due to the complexity of what a child learns in the classroom.

If merit pay is going to be implemented successfully, the key components that are found in successful models are making sure the criteria of merit pay is mission focused (Slotnik, 2009), and that employees have buy-in before it is implemented (Milkovich & Newman, 1990). Once teacher buy-in is reached, all of the employees must understand the criteria to reach merit pay (Rebore, 2007). Not only do employees need to understand, they need to believe in the system that is put in place (Marsh et al., 2011). If these key components are followed, researchers believe that the merit pay program could be successful.

The literature shows that merit pay, when implemented properly, can be effective; however, the literature also shows that teachers are not motivated by monetary rewards unless the intrinsic motivation is heightened in the teacher first. Professional educators and government officials are constantly striving to improve the education setting for students, which is why merit pay resurfaces as a way to motivate teachers to improve their teaching strategies in the classroom. Once teachers are motivated to improve teaching strategies, then student achievement will grow and merit pay may encourage that behavior.
CHAPTER III
METHODOLOGY

Introduction

Merit pay has become another form of compensation to reward teachers who show student growth and professional growth in a given school year (Liang & Akiba, 2001). According to Gratz (2011), merit pay has the ability to add data-based evidence to the merit pay structure. Although some researchers consider merit pay to have an area of data-based evidence, they still consider merit pay to be subjective (Gratz, 2011). Even though merit pay has not been proven successful in all areas of education it still intrigues the federal, state, and local education leaders enough to implement merit pay in order to determine if it will benefit the teachers and students.

The increased interest in merit pay has brought many schools and school districts to experiment with merit pay in order to raise test scores and student achievement (Donlevey, 2008). Mississippi is conducting a 3-year merit pay pilot program in four school districts during the school years of 2013-2014, 2014-2015, and 2015-2016. During these years, if a teacher meets the criteria set by the school district, he or she will earn the appropriate monetary compensation in addition to the teachers’ current salary.

This chapter explains the data collection, procedures, and data analysis that was used in the research conducted. In addition, the research questions are stated in this chapter. In this study, research was conducted in two of the four school districts in Mississippi that are piloting the state’s merit pay system, which are Gulfport and Rankin County school districts. The first year of the 3-year pilot program has been completed in the 2013-2014 school year, and the teachers who earned the merit pay compensation
received compensation in the Fall of 2014. Therefore, the teachers have a greater knowledge of how the merit pay system works in the school district where they are employed. A Likert scale survey was used and distributed by email to teachers in two of the four school districts piloting the program through Survey Monkey.

Research Design

This research study is quantitative in design. Purposeful sampling was conducted based on two of the four school districts participating in the Mississippi merit pay pilot program. A Likert scale survey was used to retrieve data from the teachers in Gulfport and Rankin County school districts who are piloting the Mississippi merit pay program. The dependent variable is set through the teachers’ perception and the independent variables consist of the teachers’ location, years of experience, area of teaching, and how the school district set up the merit pay criteria that the teachers have to meet in order to receive merit pay. A panel of expert reviewed the survey to improve the validity of the instrument. After the panel of experts reviewed and improved the instrument, the survey was given to 12 teachers in the Rankin County School District to determine if the questions are measuring what they were set to measure and to make sure the questions are being understood by the participants. The wording of questions, vocabulary, and grammar was changed to improve the understanding of the survey. This will improve the validity and reliability of the instrument before the full research was conducted.

Participants

The participants in this study include teachers from two of the four school districts who are piloting the Mississippi merit pay program. The school districts include
Gulfport School District and Rankin County School District. Each school district has a specific demographic and community that is served within the public school system.

The Gulfport School District employs 469 teachers and serves 6,335 students with a student demographic of 52% African American, 40% Caucasian, and 81% free and reduced lunch. The Rankin County School District employs 1,467 teachers and serves 19,382 students, with a student demographic of 22% African American, 73% Caucasian, and 60% free and reduced lunch (Superintendents Annual Report, 2014; State of Mississippi Public Schools e-Rate discount calculations, 2012). Out of the 1,930 teachers that received the survey, 491 responded, thus, providing a 25.4% response rate.

**Instrumentation**

A 21-item Likert scale questionnaire assessed the teachers’ perception of a variety of component regarding merit pay. The review of literature on merit pay programs and the key components of successful merit pay programs contributed to the development of the instrument, Teachers’ Perception of Merit Pay (Appendix A). The questionnaire asked the teachers to rate their perception of the given question on a scale of strongly agree (SA) = 5, agree (A) = 4, disagree (D) = 2, strongly disagree (SD) = 1, and don’t know (DK) = 3.

A panel of experts reviewed the survey to ensure content validity. Twelve teachers piloted the questionnaire in the Rankin County School District to ensure the validity and reliability of the questions, as well as to gain feedback from the teachers relating to questions that were misunderstood or confusing. The data from the pilot study was entered into SPSS to calculate the reliability of the survey instrument with Cronbach Alpha calculated at .720 for teachers’ perception. After the pilot study, validity and
reliability was improved based on the feedback given by the 12 teachers in the pilot study. The feedback was analyzed and the questionnaire was improved before it was distributed to all of the teachers in the two of the four school districts piloting the Mississippi merit pay program.

The questions on the questionnaire link to each research question as follows: questions 5, 6, 8, 11, 12, 16, 17, 19, and 21 on the questionnaire relate to research question 1, which is what are the perceptions of teachers in the state of Mississippi regarding merit pay; question 4 on the questionnaire relate to research question 2 which is do teachers in a low-socioeconomic school have a different perspective than those teachers in a high socioeconomic school. Low socioeconomic schools are considered those schools receiving Title 1 funds, which is a federal program providing “funding to schools across the country for students at risk of failure and living at or near poverty” (Guilfoyle, 2013, p.1). In this study, the Mississippi Department of education’s definition of a low-socioeconomic school was used stating, “schools enrolling at least 40 percent of students from poor families are eligible to use Title 1 funds” (Title 1, 2012, p. 1). Therefore, high socioeconomic schools are those school not receiving Title 1 funds. Questions 1 and 2 relates to research question 3 which is do perceptions differ between veteran teachers with more than 5 years of experience as opposed to teachers with 5 or less years of experience; question 3 relate to research question 4 which is do teachers’ perceptions in nontested grades differ from teachers’ perceptions in tested grades; questions 7, 9, 10, 13, 14, 15, and 20 relate to research question 5 which is does the criteria set up by the individual piloting school district have a relation to the teachers’ perception?
Procedures

Before beginning the study permission from The University of Southern Mississippi Institutional Review Board (IRB) was granted (Appendix D). A permission letter (Appendix B) was sent to each of the four superintendents who are a part of the pilot program to gain permission to administer the questionnaire to the teachers in their school district. Once the permission was granted (Appendix E), the survey was sent to 12 teachers at an elementary school in Rankin County School District through email. These teachers were chosen based on the researchers’ knowledge of what they knew about merit pay and the possibility of them returning the questionnaire. Teachers made comments and suggestions on the survey before returning it to the researcher. Participants in the pilot program were not included in the current study.

After the pilot study was conducted and the instrument was improved, an email was sent out by the two superintendents who gave permission that explained who the researcher was, the affiliated university, the purpose of the questionnaire, and that the questionnaire is completely voluntary according to the International Review Board (IRB) participation guidelines (Appendix C). The superintendents’ email to all teachers in the school district contained the questionnaire link to Survey Monkey, an Internet survey site. This site allowed the participants to complete the survey anonymously to ensure confidentiality and accuracy. As stated before, the questionnaire link was sent to 1,930 teachers throughout the two school districts, and with 25.4% participation a total of 491 teachers were a part of the sample population. A week after the Survey Monkey link was sent to the teachers a reminder email was sent which helped increase participation in the research.
Data Analysis

After all of the data was collected, all data was entered into SPSS. Percentages and central tendencies were calculated to determine frequency of an answer, the mean, and standard deviation. To determine teacher perceptions regarding research question one, teachers’ perception of merit pay descriptive statistics were used; research questions 2, 3, and 4 were analyzed by conducting a t-test comparing teachers’ perceptions in research question 1 to research question 2, which is low socioeconomic versus high socioeconomic areas. Research question 3 was analyzed by conducting a t-test comparing the data from veteran teachers and teachers with 5 or less years; and a third t-test was ran using research question 4 which is nontested grade teachers versus tested grade teachers. The fifth research question, does the criteria make a difference in the teachers’ perception, was analyzed through a correlation between teachers’ perception and the criteria.

Summary

Understanding teachers’ perceptions regarding merit pay in Mississippi is the research question. There are four secondary research questions which are do perceptions differ between teachers in low socioeconomic and higher socioeconomic areas; do perceptions differ between teachers with 5 or more years of experience and teachers with less than 5 years of experience; do perceptions differ between teachers teaching in tested subject areas and teachers teaching in nontested subject areas; as well as understanding the teachers’ perception of the criteria set by the school district that the teachers have to meet in order to receive merit pay.
This study is quantitative in design using a Likert scale questionnaire given to two of the four different school districts in Mississippi that are piloting the state’s merit pay system. The two school districts included in the study were Gulfport School District and Rankin County School District. There are 1,930 teachers in the two school districts, and 25.4% responded to the questionnaire, which is a total of 491 teachers who were in the sample of this study.

The questionnaire was distributed in the two school districts with written permission from the superintendents. Using the Internet survey site Survey Monkey, a link was emailed to the teachers by the superintendent in each school district requesting voluntary participation in the questionnaire. In order to increase the participation in the questionnaire, a reminder email was sent out the week following the survey. After the data was ready to be analyzed, descriptive statistics were conducted to show if there was a difference in the perceptions of teachers regarding merit pay. Three t-tests were conducted for research questions 2, 3, and 4. Then, a correlation analysis was conducted to see if the criteria a school district has in place effects teachers’ perception.
CHAPTER IV
ANALYSIS OF DATA

Introduction

The purpose of this study was to understand teachers’ perception in Mississippi regarding merit pay. This study was also designed to determine if teachers who taught in a low socioeconomic area had a more negative or positive perception of merit pay. In addition, this study was designed to determine if veteran teachers (defined in this study as teachers with 6 or more years experience) had a more negative or positive perception of merit pay. Another area that the study was designed to understand is the perception of teachers who teach nontested grades as opposed to teachers who teach tested grades, which is defined as a grade when students are required to take a state mandated standardized test. The last area that the study was designed for is determining if the criteria set by the individual school district had a relation to the teachers’ perception of merit pay. A researcher-created Likert scale questionnaire was used to gather data relating to teachers’ perception of merit pay. The questionnaire was sent out to certified teachers in two out of the four public school districts piloting the Mississippi merit pay program. A Survey Monkey questionnaire link was emailed to 1,930 teachers from the superintendent of their school district, with 491, or 25.4%, of the teachers completing the questionnaire. This chapter presents the descriptive statistics of the respondents and the data analysis that was used to better understand teachers’ perception of merit pay.

Data

Table 1 consists of the descriptive statistics for participants. The sample size was 491 K-12 certified teachers who were employed in two of the four public school districts
piloting the merit pay program. Years of experience, first year in the piloting district, current teaching position, and type of school was collected to better understand various teachers perception of merit pay. Teachers who have taught 0-5 years, and are defined by the study as non-veteran teachers, comprised of 24.39% (n=120) of the population. Where as teachers who have taught 6 or more years, and are defined by the study as veteran teachers, comprised of 75.61% (n=372) of the population. There was 13.62% (n=67) of the population who had just completed their first teaching year in the piloting school district and had not had the opportunity to receive merit pay in Fall of 2014. There was 86.38% (n=425) of the population that had been employed by the school district for more than 1 year. If the certified teacher that had been teaching in the school district and met each part of the merit pay criteria the previous year, they were rewarded merit pay in Fall of 2014, therefore 86.38% of the participants had an opportunity to earn merit pay in Fall 2014. The population was fairly equal between teachers teaching in a tested subject area (defined by the study to be a subject with an end of the year state standardized test) 43.90% (n=216) and teachers teaching in a nontested subject area at 56.10% (n=276). The population was also fairly equal between teachers teaching in a title 1 school (defined by the study as having 40% or higher of the students receiving free or reduced lunch) at 52.34% (n=257) and teachers not teaching in a title 1 school at 47.66% (n=234).
Table 1

*Population Descriptive*

<table>
<thead>
<tr>
<th>Description</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>120</td>
<td>24.39</td>
</tr>
<tr>
<td>6-10 years</td>
<td>113</td>
<td>22.97</td>
</tr>
<tr>
<td>11-15 years</td>
<td>96</td>
<td>19.51</td>
</tr>
<tr>
<td>16+ years</td>
<td>163</td>
<td>33.13</td>
</tr>
<tr>
<td><strong>First Year in District</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>67</td>
<td>13.62</td>
</tr>
<tr>
<td>No</td>
<td>425</td>
<td>86.38</td>
</tr>
<tr>
<td><strong>Current Teaching Position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tested Subject Area</td>
<td>216</td>
<td>43.90</td>
</tr>
<tr>
<td>Nontested Subject Area</td>
<td>276</td>
<td>56.10</td>
</tr>
<tr>
<td><strong>Type of School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title 1 School</td>
<td>257</td>
<td>52.34</td>
</tr>
<tr>
<td>Non-Title 1 School</td>
<td>234</td>
<td>47.66</td>
</tr>
</tbody>
</table>
Teachers’ perceptions were better understood through the descriptive statistics of the Likert scale survey questions 5-21 (Table 2).

Table 2

*Descriptive Statistics: By Individual Questions*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. The merit pay pilot program motivates me to work harder to increase student achievement.</td>
<td>2.71</td>
<td>1.26</td>
</tr>
<tr>
<td>6. The merit pay pilot program encourages me to change my teaching strategies to increase student achievement</td>
<td>2.64</td>
<td>1.22</td>
</tr>
<tr>
<td>7. My school district involves teachers in the process of creating the merit pay criteria for teachers to meet.</td>
<td>3.06</td>
<td>1.19</td>
</tr>
<tr>
<td>8. It is important that all teachers in tested and nontested areas have the opportunity to earn merit pay.</td>
<td>4.14</td>
<td>1.03</td>
</tr>
<tr>
<td>9. Since tested areas have more impact on teacher and school accountability, merit pay should reward tested areas with a greater reward.</td>
<td>2.80</td>
<td>1.42</td>
</tr>
<tr>
<td>10. I feel that I am knowledgeable about the criteria I have to meet in order to earn merit pay.</td>
<td>3.55</td>
<td>1.16</td>
</tr>
<tr>
<td>11. It is important for veteran teachers to earn more money because they have been teaching longer</td>
<td>3.40</td>
<td>1.21</td>
</tr>
<tr>
<td>12. It is important for teachers to be rewarded when their students show academic growth.</td>
<td>3.87</td>
<td>.97</td>
</tr>
<tr>
<td>13. Any amount of money would motivate me to teach to a higher standard.</td>
<td>2.69</td>
<td>1.18</td>
</tr>
<tr>
<td>14. The criteria my school district has set for teachers in the pilot program are fair for all teachers.</td>
<td>2.73</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Table 2 (continued).
### Test of Research Questions

**Teachers’ Perception of Merit Pay**

Teachers’ perception was analyzed through descriptive statistics by creating a new variable using survey questions (5, 6, 8, 11, 12, 16, 17, 19, 21) and providing data for research question one, which is what are the perceptions of teachers in the state of Mississippi regarding merit pay. The mean was 3.04 with a standard deviation of .69 for teacher perception (Table 3). The highest frequency of teachers (n=215) scored between a 3.00-3.89 in teachers’ perception, with 24 teachers who scored between 1.11-1.89, 199 teachers who scored between 2.00-2.89, 52 teachers who scored between 4.00-4.78, and 1 teacher who scored a 5.00 in teacher perception of merit pay (Table 4). The frequency of

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. All teachers in my school district have the opportunity to earn merit pay.</td>
<td>3.38</td>
<td>1.05</td>
</tr>
<tr>
<td>17. I would change my teaching habits to make sure I earn merit pay if the monetary reward was more than $3,000.</td>
<td>3.43</td>
<td>1.33</td>
</tr>
<tr>
<td>18. Merit pay is unfair because my students’ academic level is low, and it is hard to show growth.</td>
<td>2.83</td>
<td>1.15</td>
</tr>
<tr>
<td>19. When the merit pay pilot program was set up I changed my teaching habits to make sure I earned merit pay.</td>
<td>2.26</td>
<td>.95</td>
</tr>
<tr>
<td>20. Money does not motivate me to be a better teacher. (reverse coded)</td>
<td>2.51</td>
<td>1.24</td>
</tr>
<tr>
<td>21. Merit pay has increased the teamwork among the teachers I work with.</td>
<td>2.31</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Note Scale: 5=Strongly Agree to 1=Strongly Disagree and 3=Don’t Know
teachers that scored below 3.00 (n=223) determined a large group of teachers do not have a high perception of merit pay. The frequency of teachers that scored above 3.00 (n=268) determined a large group of teachers have a high perception of merit pay.

Although the perception of merit pay varies among teachers, teachers do believe that they should be rewarded when students show academic growth (M=3.89, SD=.97), which was determined by question 12 of the survey. There was 81.26% (n=399) of teachers surveyed, who agreed or strongly agreed teachers should be rewarded, 13.85% (n=68) who disagreed or strongly disagreed, and 4.89% (n=24) who did not know what they believed. While teachers desire a reward for showing student growth, the questions in the survey relating to merit pay being a motivating factor, resulted in low mean scores. The survey questions pertaining to merit pay being a motivating factor to change teaching strategies and improve student achievement were questions 5 (M=2.71, SD=1.26), 6 (M=2.64, SD=1.22), 16 (M=2.6, SD=1.08), 17 (M=3.43, SD=1.33), 19 (M=2.26, SD=.95), and question 21 (M=2.31, SD=1.05). Question 5 states, the merit pay pilot program motivates me to work harder to increase student achievement (M=2.71, SD=1.26) and 53.97% of the teachers surveyed disagreed or strongly disagreed with the statement.

There were 39.11% (n=192) who agreed or strongly agreed and 6.92% (n=34) who did not know what they believed. Question 6 states, the merit pay pilot program encourages me to change my teaching strategies to increase student achievement (M=2.64, SD=1.22) and 57.64% (n=283) of the teachers surveyed disagreed or strongly disagreed with the statement. There were 35.44% (n=174) who agreed or strongly agreed with the statement and 6.92% (n=32) who did not know what they believed. Question 16 states, “I would change my teaching habits to make sure I earn merit pay if the monetary reward was
$100-$1,000” ($M=2.6, SD=1.08) and 57.92% (n=285) of the teachers surveyed disagreed or strongly disagreed with the statement. There were 30.49% (n=150) who agreed or strongly agreed with the statement, and 11.59% (n=57) who did not know what they believed. Question 17 states, “I would change my teaching habits to make sure I earn merit pay if the monetary reward was more than $3,000” ($M=3.43, SD=1.33) and only 33.20% (n=163) of the teachers surveyed disagreed or strongly disagreed with this statement. There were 57.03% (n=280) who agreed or strongly agree and 9.78% (n=48) who did not know what they believed. Question 19 states, “When the merit pay pilot program was set up I changed my teaching habits to make sure I earned merit pay” ($M=2.26, SD=.95) and 74.54% (n=366) of the teachers surveyed disagreed or strongly disagreed with the statement. There were 17.11% (n=84) who agreed or strongly agreed with the statement, and 8.35% (n=41) teachers that did not know if they agreed or disagreed with the statement. Question 21 states, “Merit pay has increased the teamwork among the teachers I work with” ($M=2.31, SD=1.05) and 67.01% (n=329) of the teachers surveyed disagreed or strongly disagreed with the statement. There were 16.29% (n=80) who agreed or strongly agreed with the statement and 16.70% (n=82) who did not know what they believed.
Table 3

Descriptive Statistics: Teachers’ Perception

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>491</td>
<td>1.11</td>
<td>5.00</td>
<td>3.04</td>
<td>.69</td>
</tr>
</tbody>
</table>

Table 4

Frequency: Teachers’ Perception Score

<table>
<thead>
<tr>
<th>n</th>
<th>Perception Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>1.11 – 1.89</td>
</tr>
<tr>
<td>199</td>
<td>2.00 – 2.89</td>
</tr>
<tr>
<td>215</td>
<td>3.00 – 3.89</td>
</tr>
<tr>
<td>52</td>
<td>4.00 – 4.78</td>
</tr>
<tr>
<td>1</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Teachers’ Perception in Low and High Socioeconomic Areas

Research question two, do teachers in a low socioeconomic schools have a different perception than those teachers in high socioeconomic schools, was analyzed through an independent sample t-test comparing teachers’ perception and the socioeconomic level of the school teachers’ taught in, which was defined in this study as a school that has 40% or higher of the students on free or reduced lunch. There was no significant difference in scores between teachers in low socioeconomic schools ($M =$
2.98, $SD = .70$) and teachers in high socioeconomic schools, $M = 3.10, SD = .67; t (489) = -1.86, p = .06$ (two-tailed). The results suggest that there is no difference in teachers’ perception of merit pay from a low socioeconomic school and a higher socioeconomic school.

Table 5

*Teachers’ Perception in Low and High Socioeconomic Areas*

<table>
<thead>
<tr>
<th>Title 1 School</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Perception</td>
<td>Yes</td>
<td>257</td>
<td>2.98</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>234</td>
<td>3.10</td>
</tr>
</tbody>
</table>

*Teachers’ Perception Between Veteran and Non-Veteran Teachers*

An independent t-test was conducted to measure research question three, which is do perceptions differ between veteran teachers who have more than 5 years experience as opposed to teachers with 5 or less years of experience. The t-test compared the veteran teachers (6+ years of teaching experience) and the non-veteran teachers (0-5 years of teaching experience). There was no significant difference in scores for veteran teachers ($M = 3.013, SD = .678$) and non-veteran teachers, $M = 3.12, SD = .71; t (489) = 1.51, p = .133$ (two-tailed). The results suggest that there is no difference in teachers’ perception of merit pay between veteran teachers and non-veteran teachers. Survey question 11 states, it is important for veteran teachers (teachers with 5+ years experience) to earn more money because they have been teaching longer ($M=3.40, SD=1.21$) and 51.73% (n=254) of the teachers surveyed agreed or strongly agreed with the statement. There
were 42.97% (n=211) who disagreed or strongly disagreed with the statement and 5.30% (n=26) who did not know what they believed.

Table 6

*Teachers’ Perception Between Veteran Teachers and Non-Veteran Teachers*

<table>
<thead>
<tr>
<th>Teachers’ Perception</th>
<th>Veteran or Non-Veteran</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Perception</td>
<td>Veteran</td>
<td>371</td>
<td>3.01</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td>Non-Veteran</td>
<td>120</td>
<td>3.12</td>
<td>.71</td>
</tr>
</tbody>
</table>

*Teachers’ Perception Between Teachers in Tested Grades and Nontested Grades*

Teachers who teach in tested grades (defined as classes where students have to take a state standardized test at the end of the school year) and those teachers who teach in nontested grades were compared using an independent t-test to measure research question four, do teachers’ perception in nontested grades differ from teachers’ perception in tested grades. There was not a significant difference in scores for teachers teaching in tested grades ($M = 3.01; SD = .71$) and teachers teaching in nontested grades, $M = 3.06, SD = .67; t (489) = -.83, p = .409$ (two-tailed). The results suggest that there is no difference in teachers’ perception of merit pay between teachers teaching tested grades and teachers teaching nontested grades. Question 8 in the survey, it is important that all teachers in tested and nontested areas have the opportunity to earn merit pay ($M=4.14$, $SD=1.03$) determined that 86.99% (n=428) of teachers surveyed agreed or strongly agreed to the statement. There were 9.75% (n=48) who disagreed or strongly disagreed to the statement and 3.25% (n=16) who did not know what they believed.
Table 7

*Teachers’ Perception Between Teachers in Tested and Nontested Areas*

<table>
<thead>
<tr>
<th>Tested Area or Nontested Area</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Perception Tested Area</td>
<td>215</td>
<td>3.01</td>
<td>.71</td>
</tr>
<tr>
<td>Nontested Area</td>
<td>276</td>
<td>3.06</td>
<td>.67</td>
</tr>
</tbody>
</table>

*Teachers’ Perception Relating to Criteria*

Research question 5, does the qualifying criteria set up by the individual piloting school district have a relation to the teachers perception was answered by conducting a correlation. The relationship between teachers’ perception (M = 3.04, SD = .69) and the criteria (M = 2.96, SD = .64) set for teachers to meet in order to earn merit pay was investigated using Pearson product-moment correlation coefficient. There was a moderate, positive correlation between the two variables, \( r = .607, N = 491, p < .01 \), with 36.8% of the variation explained. The results suggest that there is a moderate correlation between the criteria that is set and the teachers’ perception of merit pay. The descriptive statistics in survey question 10, I feel that I am knowledgeable about the criteria I have to meet in order to earn merit pay (\( M=3.55, SD=1.16 \)), showed 71.08% (n=349) of teachers surveyed agreed or strongly agreed that they understood the criteria they have to meet to earn merit pay. Only 23.63% (n=116) of the teachers disagreed or strongly disagreed with the statement and 5.30% (n=26) didn’t know what they believed about the statement.
Table 8

*Correlation: Descriptive Statistics*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Perception</td>
<td>491</td>
<td>3.04</td>
<td>.69</td>
</tr>
<tr>
<td>Criteria</td>
<td>491</td>
<td>2.96</td>
<td>.64</td>
</tr>
</tbody>
</table>

Summary

A survey was sent out to two school districts piloting the merit pay program and 491 certified teachers participated in the survey. The results of the survey indicated that teachers’ perception does not differ between a teacher in a low socioeconomic school and a teacher in a high socioeconomic school. When analyzing the perceptions of veteran teachers and non-veteran teachers the results show no difference in their perceptions. Teachers teaching in tested grades did not have a different perception than those teachers teaching in nontested grades. However, the results did show that if the teacher understands and accepts the merit pay criteria that must be met in order to earn merit pay there is a moderate positive correlation to the teachers’ perception. An overview of the study, a summary of the findings, recommendations for future studies, and conclusions will be presented in Chapter V.
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

Introduction

The goal of education is to increase student achievement. Motivation comes through external and internal sources with the monetary value of merit pay being an external source to motivate teachers to change teaching habits in order to increase student achievement. Although, according to Maslow’s hierarchy of needs, one cannot reach the highest level of self-actualization without reaching the four levels of physiological needs, safety needs, motivational needs, and esteem needs that come before self-actualization. Anderson (2004) defined self-actualization as the “desire to become more and more what one is, to become everything that one is capable of becoming” (p. 51). If merit pay can bring teachers to the level of self-actualization then teachers may reflect on the teaching strategies that need to be changed, or improved, to increase student achievement.

No matter the situation or time, most educators strive to see all students succeed at a higher level in order to become productive citizens of the community. Therefore, according to Winters et al., “performance pay may be an effective strategy not just for improving overall achievement, but more particularly for closing the achievement gap” (p. 2). The purpose of this study was to better understand teachers’ perception of merit pay and the perception comparisons between a teacher in a low socioeconomic area and a teacher in a high socioeconomic area, a veteran teacher who has taught six years or more and a teacher who has taught less than five years, a teacher who teaches a tested grade and a teacher who teaches a nontested grade, and then if the criteria of merit pay has a correlation to the teachers perception.
The multiple research questions stated above researching teachers’ perception was measured using a Likert scale survey created by the researcher. Data was collected and analyzed using descriptive statistics, t-tests, and a correlation to determine if there were any differences between the teacher demographics and understanding of the merit pay program. The correlation that was studied was to determine if teachers’ perception positively increases if they have a higher understanding of the criteria they have to meet to earn merit pay.

The purpose of this study was to determine if teachers had a positive or negative perception of merit pay and if teachers’ perceptions differed between teacher demographics. A survey was sent out to certified teachers in two school districts that are piloting a merit pay program, with 491 teachers completing the survey. Having a better understanding of how teachers perceive the state merit pay program will help state and local educational leaders to determine if implementing a merit pay program is beneficial. If merit pay were a motivating factor for teachers to increase the rigor of the curriculum and change the ineffective teaching strategies to ultimately increase student achievement, then merit pay would be a positive program to implement for the public school teachers in the state of Mississippi. However, if the program were implemented in a way that it is not motivating to teachers, then tax dollars would be wasted.

Summary of Findings

This study was designed to better understand teachers’ perception in Mississippi regarding the merit pay pilot program. A Likert scale survey link was sent out using the Survey Monkey website. Data was collected and analyzed to determine if teachers had a positive or negative perception of merit pay. In addition, the data was analyzed to
determine if there was a difference in the perceptions between teachers in contrasting demographic groups.

After the data was collected and analyzed multiple research question were tested. The overarching research question that was tested was teachers’ perception of merit pay. A research question that was tested using a t-test was to determine, do teachers in a low socioeconomic school have a different perspective than those teachers in a high socioeconomic school. Another research question that was tested using a t-test was, do perceptions differ between veteran teachers who have more than 5 years of experience as opposed to teachers with 5 or less years of experience. The fourth research question that was tested using a t-test was to determine, do teachers’ perception in nontested grades differ from teachers’ perception in tested grades. Then, a correlation was analyzed to determine, does the criteria set up by the individual piloting school district have a relation to the teachers’ perception of merit pay.

*Teachers’ Perception of Merit Pay*

Research question one, what are the perceptions of teachers in the state of Mississippi regarding merit pay, determined that teachers’ perception of merit pay did not have an overly positive or overly negative perception of merit pay. The frequency of teachers who scored below the mean show that a large group of teachers do not have a high perception of merit pay and therefore are not motivated by the program. However, the frequency of teachers who scored above the mean show that a large group of teachers have a positive perception of how the pilot program is being implemented. Although the teachers’ perception was both positive and negative it was determined from the survey
that it is important to the teachers that they be rewarded when students show academic growth.

Multiple factors could be contributing to the teachers’ perception not being higher. Based on survey question results, one factor could be a lack of motivation and encouragement the merit pay pilot program provided to change teaching strategies in the classroom and in turn increase student achievement. According to Morey (2008), merit pay will help encourage teachers to reflect on their teaching practices, however the data did not reveal the teachers surveyed had changed teaching strategies when the merit pay pilot program was implemented. The data in this study regarding teachers’ perception and motivation are in contrast with the Denver ProComp Plan and the Arkansas Challenge Project that both showed an increase in teacher motivation and effectiveness. Research shows that when all stakeholders are represented throughout the creation of the program they become engaged and involved in the process, therefore maximum buy-in is created (Tryjankowski et al., 2012). According to Rebore (2007), when teachers are more engaged in the process motivation is increased.

Another factor that could be contributing to a lower perception of merit pay is the addition of new criteria in the second year of the pilot program, creating dissension among the teachers. Gratz (2009a) suggested that until the definition of student performance and teacher performance is solid and concrete, merit pay would not meet its highest potential. Although the perception of teachers is not extremely low, it is not high enough to have an effect on increasing teacher motivation or encouraging teachers to change teaching strategies to increase student achievement.
Low Socioeconomic vs. High Socioeconomic

Research question two, do teachers in a low socioeconomic school have a different perspective than those teachers in a high socioeconomic school, compared to those teachers teaching in a low socioeconomic school using a t-test to analyze the data. The data showed there was no difference in teachers’ perception of merit pay between low socioeconomic and high socioeconomic. Although the school demographics and student backgrounds are different in the socioeconomic areas the teachers’ perception shows no difference.

Most teachers are in the field of education to inspire, motivate, and watch students reach their highest potential. The data comparing the different socioeconomic areas show that although teachers might be teaching students with a lower prior knowledge about the world around them, they still believe the students can learn. Teachers teaching in a low socioeconomic area are not against merit pay because of the low socioeconomic area. Descriptive data showed that more than half of the teachers believed the students low academic level did not have an effect on the fairness of merit pay. In comparison the Arkansas Achievement Challenge Project was implemented in five disadvantaged elementary schools and showed that students taught by teachers who were eligible for merit pay scored higher on state tests (Weldon, 2011; Winters et al., 2008). This comparison does not show if merit pay works, but that teachers teaching in low socioeconomic areas are not against merit pay simply because the students are on a lower academic level.
Veteran Teachers vs. Non-Veteran Teachers

In this study veteran teachers are defined as teachers who have taught for six or more years and non-veteran teachers are defined as teachers who have taught for five or less years. Research question three, do perceptions differ between veteran teachers who have more than 5 years experience as opposed to teachers with 5 or less years of experience, compared veteran teachers to non-veteran teachers using a t-test to analyze the data. The data showed there was no difference in veteran teachers’ perception of merit pay and non-veteran teachers. Although there is a difference in the years of teaching experience the teachers’ perception shows no difference. Another data point that was analyzed was a survey question, which asks if it is important for veteran teachers to earn more because they have been teaching longer.

While there is no difference in teachers’ perception of merit pay, the survey question showed that slightly over half of the teachers strongly agree or agree that veteran teachers should get paid more based on their years of teaching. However, there was also a large population of teachers who strongly disagreed or disagreed that teachers should get paid more based on more years of experience. The effectiveness of the teacher does not always depend on the years of experience, and according to Winters et al. (2008), the merit pay bonus for the Arkansas Achievement Challenge Project was most effective with those teachers who were considered to be the least effective when the program started.

Tested Grades vs. Nontested Grades

For this study a teacher who taught in a tested grade is defined as an area that students have to take a state standardized test at the end of the course and nontested
teachers have taught a grade that does not require a state standardized test. Research question four, do teachers’ perception in nontested grades differ from teachers perception in tested grades, compared teachers who taught in tested areas to teachers who taught in nontested areas using a t-test to analyze the data. The data showed there was no difference in teachers’ perception of merit pay between teachers who taught in tested areas and nontested areas.

Although teachers who teach in tested areas are accountable for state test scores for their individual class and for the school accountability score, when teachers answered a question in the survey about it being important for all teachers to earn merit pay the majority of the teachers surveyed agreed or strongly agreed with the statement. This data showed that teachers understand all areas of the education process are important for the success of a student and all teachers should have the opportunity to earn merit pay.

Relation Between Criteria and Teachers’ Perception

Research question five, does the criteria set up by the individual piloting school district have a relation to the teachers perception, analyzed the relationship between teachers’ perception and the criteria set for teachers to meet in order to earn merit pay. Pearson product-moment correlation coefficient was used to determine that there was a moderate, positive correlation between the two variables. The results suggest that there is a moderate correlation between the criteria that is set and the teachers’ perception of merit pay.

Criteria in this study focused on the amount of the merit pay reward, which teachers should have the opportunity to earn merit pay, the process on how the criteria was set, and the fairness of the program. According to Tryjankowski et al. (2012),
teachers need to know exactly what to do to achieve the goals of the merit pay system. The data in this study showed more than half of teachers agreed and strongly agreed that they understood the criteria they had to meet according to question 10 in the survey.

A merit pay program that is designed with fair, transparent, and measurable goals, Muralidharan and Sundararaman (2011) said, will increase a teacher’s intrinsic motivation. It was determined, based on a survey question, that teachers surveyed did not find the merit pay program in their school district fair, which could be a result of the changing criteria from year to year throughout the pilot program. When more teachers are involved in the process a greater level of buy-in is reached which would create a stronger vision of a fair program.

However, when teachers were asked about money the answers varied. Teachers answered they are not motivated by money, which is in comparison with research conducted by Hanushek and Rivken (2007) finding teachers are not motivated by money. Teachers surveyed agreed they would not change teaching habits if the monetary reward was less than $1,000. In contrast teachers surveyed may change teaching habits if the merit pay reward was more than $3,000. Just as Goodman and Turner (2011) reported, monetary incentives must be large enough to encourage altering teaching practices. Although teachers say they are not motivated by money, if the monetary value is large enough the teachers’ motivation level would increase.

Recommendations for Policy and Practice

This study provides local and state leaders a look at how the teachers in the Mississippi merit pay pilot program perceive the program. Being that the teachers did not score incredibly high in perception, more could be done to positively increase the
perception of teachers. Small changes in how the criteria is set within each school
district, the communication about the criteria to the teachers, and making the criteria
match the mission of the local school district are a few changes that could be made to
improve the program.

Most districts create a team of teachers comprising of a select group when
creating the criteria for teachers to meet, however this system only allows for the select
group to take ownership of the program. In order to widen the buy-in among teachers
district wide a survey could be sent to teachers for input and clarification. Once criteria
are set, an organized display of the criteria could be sent to all teachers who have the
opportunity to earn merit pay, which may be a letter from the superintendent, a letter
from the principal, or another way to make the criteria stand out to the teachers. Email is
a common form of communication in today’s society, however with teachers’ emails
becoming overloaded an email regarding merit pay may get overlooked. A greater
understanding of the criteria could increase the mean score of how knowledgeable
teachers are about merit pay and ultimately increase teachers’ perception. Another
recommendation for local school district leaders is making each part of the criteria match
the school district mission statement. Although the criteria set could already match the
mission statement, making it clear to all teachers is important. It could be as simple as
teachers must show student academic growth, so students can become productive parts of
the community. When linking part of the mission statement to the criteria teachers will
better understand the reasoning for the specific criteria they must meet. This would
increase ownership of the merit pay program and have a greater impact on how the
teachers’ receive and perceive the program.
Money in education is most of the time difficult to come by, however when implementing merit pay the monetary reward must be high enough for teachers to find it motivating. Most teachers do not want to say they are motivated by money, however the mean score positively increased by .92 when teachers were asked if they would change their teaching habits if they were awarded more than $3,000. Therefore more money, or merit pay, has the potential to motivate teachers when the monetary value is high enough and the program is implemented with the key components of successful programs.

The students’ academic growth is the core of education and when teachers are changing teaching habits to increase academic growth, students will show growth. There are many ways to motivate, and as the literature review states, each teacher is on a different motivation level. Merit pay is just one way educational and political leaders are striving to motivate teachers and in turn increase student achievement.

When merit pay programs are implemented all teachers should be involved in the process, the criteria should be linked to the district’s mission statements, the criteria should be communicated to the teachers clearly, and the monetary reward should be high enough to motivate the teachers to improve instruction in the classroom. Teachers in this study believe that hard-working, dedicated teachers should be rewarded for showing student academic growth. Ultimately, the success of the merit pay program depends on how the program is implemented and received by teachers.

Limitations

There were some limitations within the study. One limitation would be there are teachers who were employed with the district when the pilot program was implemented and have already received the first year merit pay based on the school district’s criteria as
well as first-year teachers who may not have as much knowledge about the merit pay program within the district in which they are working. The sample size depended on the superintendents and administrators who encourage their teachers to participate in the study, creating limitations among the participants. When the questionnaire was sent out, only two school districts were able to participate in the study, therefore, not all four school districts were able to participate which did not allow for a true representation of the entire merit pay pilot program. Due to only two school districts participating and the survey being sent out at the end of the school year, the population (n=491) was small compared to the total number of teachers (n=2,885) participating in the pilot program in all four school districts. Due to time constraints, the respondents only had three weeks to complete the questionnaire and be part of the study, which could have impacted the participation. This research only gives the perception teachers have in the middle of the pilot program. With changes being made by state leaders to improve the program perceptions may change after the pilot program is completed.

Recommendations for Future Research

Future research should be completed to better understand the perceptions Mississippi teachers have on merit pay when the pilot study is complete. If school districts improve on how the program is implemented based on the key components, a teachers’ perception survey could be taken after the improvements have been made to determine if perceptions have changed. Also, to better understand what motivates teachers in Mississippi, research on teacher motivation could be conducted, which could also include monetary values to better understand the monetary range when teachers’
motivation increase. In order for a merit pay system to work, teachers’ motivation must be understood.

Summary

Education is the cornerstone of our society. It is what develops the great doctors, engineers, architects, teachers, and other professions who create the thriving communities. In order to improve education, student achievement must increase. In order for student achievement to increase teacher motivation must increase so instructional changes in the classroom will happen. One way educational and political leaders are trying to motivate teachers is through the use of merit pay.

Merit pay has been around since the 1800s and continues to be used through government funds to motivate teachers and increase student achievement. In a way to increase the student achievement, the Governor and Mississippi legislatures, have implemented a merit pay pilot program in four school districts across the state. The program will last three years and began in Fall of 2013, the first merit pay reward was awarded in the Fall of 2014, and the last year of the program will begin in the Fall of 2015.

In this study, two out of the four school districts were surveyed to better understand the teachers’ perception of merit pay. After gaining IRB permission the superintendents emailed the teachers a Likert scale survey link using the site Survey Monkey. The researcher followed up a week after the first link was sent to ask the principals to forward the link to the teachers again for those teachers who did not complete the survey the first time to complete it, which increased the participants. The
questionnaire was sent out to a total of 1,930 certified teachers in two public schools and 491 teachers completed the survey.

When analyzing the data, teachers’ perception of merit pay was average ($M=3.03$), showing the teachers are not against merit pay, but they are not positive about it either. Teachers teach in many different areas and this research found that there is no difference in the teachers’ perception of merit pay between teachers who teach in a title 1 school (defined as a school with 40% free and reduced lunch), and teachers who do not teach in a title 1 school. There is also no difference between veteran teachers and non-veteran teachers, or teachers who teach tested grades (defined as the student have to take a state standardized test at the end of the year), and teachers who teach nontested grades. However, when a correlation was analyzed between the criteria and the teachers’ perception a moderate correlation ($r=.607$) and a 36.8% shared variance was found. Therefore, if teachers understand the criteria, accept the criteria is fair, and find the monetary reward is large enough the teachers’ perception of merit pay will increase.

Merit pay is not a new concept, however it is a concept that does not show an increase in student achievement all the time. There are merit pay programs that have not been successful to increase student achievement and there are merit pay programs that are still in place because of the impact it had on increase student achievement. The successful programs followed the key components of a successful merit pay program. Merit pay may, or may not, be the answer to increasing teacher motivation and in turn student achievement. This study provided areas of improvement when implementing the program to motivate teachers to change teaching strategies in the classroom to increase
student achievement. When improvements are made more research should be conducted on the perceptions’ of teachers regarding merit pay in Mississippi.
APPENDIX A

QUESTIONNAIRE FOR TEACHERS

1. Including the current year, how many years have you taught?
   a. 0-5 years
   b. 6-10 years
   c. 11-15 years
   d. 16+ years

2. Is this your first year working for the school district with which you are currently employed?
   a. Yes
   b. No

3. What best describes your current teaching position?
   a. Tested subject area (defined as students have to take a state standardized test at the end of the school year)
   b. Nontested subject area

4. Is your school considered a Title 1 school (75% or higher free or reduced lunch)?
   a. Yes – my school is a Title 1 school
   b. No – my school is not a Title 1 school

Directions: On the questions below chose strongly agree, agree, disagree, strongly disagree, or don’t know

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<thead>
<tr>
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<th>SA</th>
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<th>D</th>
<th>SD</th>
<th>DK</th>
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<tbody>
<tr>
<td>5. The merit pay pilot program in my school district motivates me to work harder to increase student achievement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The merit pay pilot program encourages me to change my teaching strategies to increase student achievement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. My school district involves teachers in the process of creating the merit pay criteria for teachers to meet.</td>
<td></td>
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</tr>
<tr>
<td>8. It is important that all teachers in tested and nontested areas have the opportunity to earn merit pay.</td>
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</tr>
<tr>
<td>9. Since tested areas have more impact on teacher and school accountability, merit pay should reward tested areas with a greater reward?</td>
<td></td>
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<tr>
<td>10. I feel that I am knowledgeable about the criteria I have to meet in order to earn merit pay.</td>
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</tr>
<tr>
<td>11. It is important for veteran teachers (teachers with 5+ years experience) to earn more money because they have been teaching longer.</td>
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</tbody>
</table>
12. It is important for teachers to be rewarded when their students show academic growth.

13. Any amount of money would motivate me to teach to a higher standard.

14. The criteria my school district has set for teachers in the pilot program are fair for all teachers.

15. All teachers in my school district have the opportunity to earn merit pay.

16. I would change my teaching habits to make sure I earn merit pay if the monetary reward was $100-$1,000.

17. I would change my teaching habits to make sure I earn merit pay if the monetary reward was more than $3,000.

18. Merit pay is unfair because my students’ academic level is low, and it is hard to show growth.

19. When the merit pay pilot program was set up I changed my teaching habits to make sure I earned merit pay.

20. Money does not motivate me to be a better teacher.

21. Merit pay has increased the teamwork among the teachers I work with.
March 13, 2015

RE: Doctoral Research Study on Teachers’ Perceptions of Merit Pay

Dear Superintendent,

My name is Melissa Stephens. I am an assistant principal at StoneBridge Elementary School in the Rankin County School District. I am currently pursuing my Ph.D. in educational leadership at The University of Southern Mississippi. As part of my plan of study I am conducting research on Teachers’ Perception of Merit Pay. Since your school district is one of the four school districts in Mississippi piloting the performance-based pay program, I would appreciate your assistance and the participation of your teachers in completing my research.

I would like to request permission to conduct a 21-item questionnaire with your certified teachers. Upon gaining permission from you I plan on sending out the questionnaire through Survey Monkey, which is taken on a voluntary bases. All participants will be anonymous to assure the reliability and validity of the study. Please respond below with the appropriate choice and mail this letter back to me using the self addressed envelope enclosed. I would greatly appreciate it if you could mail this back to me within a week of receiving this document.

If you would like a copy of the completed study, I would be happy to share the results with you and your school district. Please contact me by email at melissa.stephens@rcsd.ms or by phone, 601-918-3916 (cell), 601-824-3287 (work) if you have any questions or concerns. Or if you would like to contact my research advisor, Dr. David Lee his contact information is (601)-266-4580.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. If you have any questions or concerns regarding this study feel free to contact the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Dr. #5147, Hattiesburg, MS 39406-0001, (601)-266-6820. Thank you in advance for your assistance in this research.

Sincerely,

Melissa Stephens

______YES, I am granting permission for my teachers to participate in this voluntary survey

______NO, I am not granting permission for my teachers to participate in this voluntary survey

________________________________________________________________________Signature of Superintendent
APPENDIX C

TEACHER SURVEY INSTRUMENT COVER LETTER

May 13, 2015

Dear Teacher,

I am conducting research for my doctoral program at The University of Southern Mississippi on the merit pay, or performance based pay, pilot program in the state of Mississippi. I am interesting in the teachers’ perception of the merit pay program that is being implemented in your school district. With a better understanding of the teachers’ perception of merit pay, the program can be improved, dissolved, or re-constructed to provide a greater motivation for teachers.

I would appreciate it if you would take 5-10 minutes to complete the 21 questions regarding merit pay. All responses to the survey will be confidential through the website survey monkey.

I have already contacted your superintendent for permission to survey the teachers in your district regarding merit pay. By completing the survey you are providing consent to participate in the research study. If you have any questions please feel free to contact me by email, Diana.stephens@eagles.usm.edu, or your may contact my advisor, Dr. David Lee, at 601-266-4580.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Dr. #5147, Hattiesburg, MS 39406-0001, 601-266-6820. Thank you in advance for your participation in this research.

Sincerely,

Melissa Stephens, Researcher

Dr. David Lee, USM Research Advisor
APPENDIX D

IRB APPROVAL

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive 65147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Event Report Form".
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 15050504
PROJECT TITLE: Teachers' Perceptions of Merit Pay
PROJECT TYPE: New Project
RESEARCHER(S): Diana Melissa Stephens
COLLEGE/DIVISION: College of Education
DEPARTMENT: Educational Leadership and School Counseling
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Exempt Review Approval
PERIOD OF APPROVAL: 05/11/2015 to 05/10/2016
Lawrence A. Hosman, Ph.D.
Institutional Review Board
Re: question
1 message

Melissa <melissa.stephens@rcsd.ms>  Thu, Apr 16, 2015 at 5:08 PM

Hey,

Just seeing if you have had a chance to talk to Mr. East. Hope you are having a good week and have a Happy Friday!

Melissa

On Wed, Apr 15, 2015 at 11:20 AM, Melissa Stephens <melissa.stephens@rcsd.ms> wrote:

Thank you [REDACTED] for helping me. I know [REDACTED] is really busy with end of the year stuff. Hope you are having a good day!

Melissa Stephens

---------- Forwarded message ----------
From: Melissa Stephens <melissa.stephens@rcsd.ms>
Date: Wed, Apr 8, 2015 at 3:13 PM
Subject: question
To: [REDACTED]@bbcschools.org

Melissa

I know you are really busy and I appreciate you talking with me. [REDACTED] had mentioned that she emailed you and said it would be okay, if you are willing of course, for me to go ahead with my merit pay survey. So, I wanted to check and see if you would be willing to allow your teachers to voluntarily participate in my research. It would just be a simple 23 question survey through a survey monkey link. It would probably take less than 10 minutes for them to complete. Let me know what you think. Thanks again for getting back to me. Hope you are having a great day.

--
Melissa Stephens
Assistant Principal
StoneBridge Elementary
March 18, 2015

Melissa Stephens  
Assistant Principal  
Stonebridge Elementary

Dear Ms. Stephens,

The Rankin County School District will participate in your research study regarding Teacher’s Perception of Merit Pay.

The district is aware that you will work in full compliance with the guidelines and restrictions of the Institutional Review Board (IRB) at the University of Southern Mississippi, and that you will respect and follow the rules and procedures of our school district.

Our district is aware that you will survey certified teachers within the Rankin County School District. We understand that their participation is voluntary and their identification will remain anonymous throughout the process.

Sincerely,

[Redacted]

Superintendent  
Rankin County School District
REFERENCES


State of Mississippi public schools e-Rate discount calculations. (2012, September 5).


Weldon, T. (2011, November 7). *Does merit pay for teachers have merit? pros and cons*

