TEACHERS' PERCEPTIONS OF POSITIVE AND NEGATIVE OUTCOMES OF DIFFERENTIATED PAY

by

MARY JANE MACLEOD

(Under the Direction of Catherine Sielke)

ABSTRACT

The Teaching Commission, The National Commission on Teaching and America's Future, and The National Center on Education and the Economy have suggested changes in teacher pay structures that will attract and retain highly qualified and effective teachers. The use of teacher pay to advance the goal of improved student achievement that prepares United States students to compete in a global market place is receiving more and more attention. Historically teacher pay has not compared well with other professions requiring similar education. Experts recommend the involvement of teachers in decisions about teacher pay changes.

This research examines teacher perceptions about changing teacher pay from a single salary schedule to a differentiated pay structure. It examines teacher perceptions in two broad categories, 1) the degree to which teachers find certain criteria acceptable for differentiating their pay and 2) whether teachers perceive positive or negative outcomes as a result of differentiated pay. A 45 item questionnaire was developed using current literature about teacher pay and extensive review by experts. The questionnaire was administered to teachers in a large metropolitan school system in Georgia at the elementary, middle, and high school levels. The study was limited to teachers, and questionnaires completed by administrators, paraprofessionals,

and other non-certified personnel were removed from the data. Five hundred forty-eight questionnaires were considered valid for the study.

The items on the questionnaire asked about many criteria that have been suggested as a way of differentiating pay and asked teacher opinions about positive and negative outcomes of differentiated pay for teachers. The mean for each item was calculated, and each item was ranked by the mean score to show the degree to which teachers agreed with each statement. The means were subjectively compared for notable differences. The questionnaire also included an open-ended question to allow for input that might not have been covered in the other questions. These open-ended responses were categorized into positive, negative, mixed response, and neutral categories and examined. They were also categorized by content and examined. The data were also examined to determine if years of experience would indicate that teachers were more or less likely to accept certain criteria to differentiate their pay.

The results indicate that teachers may accept some forms of differentiated pay, but they generally believe that differentiated pay may cause more negative outcomes than positive outcomes. Teachers overwhelmingly agree with paying teachers more for advanced degrees and years of experience which are the components of the current single salary schedule. They also approve of paying teachers more for National Board of Professional Teaching Standards Certification and professional learning outside of contract hours which are similar in nature to advanced degrees. As the criteria become less like the status quo, teachers are less likely to agree with using them for differentiated pay. Criteria that included test scores, attendance data, and parent satisfaction were not found acceptable to teachers. The criteria that teachers find more acceptable are important to policymakers as they attempt to implement pay changes. The open-ended question showed that teachers were eager to give suggestions for implementation of

differentiated pay. While they perceived differentiated pay as causing more negative results than positive results, teacher input showed glimpses of what policymakers might do to advance the change in teacher pay. Teacher concerns about negative outcomes need to be considered and examined to determine how more positive perceptions can be cultivated. Years of experience as examined in this data had no effect on teacher attitudes about differentiating their pay.

Recent efforts to change teacher pay have taken a top down approach. These efforts have met with failure or have not been sustained. Because of the seeming resistance of teachers to change from the single salary schedule, teacher input holds even greater importance. Future efforts would benefit from considering teacher perceptions and allowing broad teacher input in the process.

INDEX WORDS: Differentiated pay for teachers, Merit pay for teachers, Pay for performance, Teacher compensation

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# DEDICATION

This dissertation is lovingly dedicated to my husband and three daughters. Steve has patiently encouraged me on those days when I had decided that I would never finish and should just stop the whole thing. Ashley, Michelle, and Janie have assisted when my fledgling computer skills were not sufficient to get my thoughts into a Microsoft document. They have listened with interest when I needed to talk, and their sense of humor always lifts my spirit when I am down. I love you all more than you can know.

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# CHAPTER 1

## INTRODUCTION

National policymakers in education are recommending changes in the way teachers are paid. Leaders in both the business world and education feel an urgency to educate our students to compete in the international marketplace. There is a call to close the achievement gap between poor and minority students and their peers. In recent decades, politicians have included education as a major issue in their policies for election. Presidents George Bush, Sr., Bill Clinton, and George W. Bush will go down in history for the educational policies enacted during their administrations. The *No Child Left Behind* legislation, PL 107-110, is demanding the attention and finances of governors in every state. The largest portion of the education budget is allocated for teacher compensation (Odden & Kelley, 1997; Odden & Kelley, 2002; Odden & Picus, 2000; Stronge, Gareis, & Little, 2006). To ensure efficient and prudent use of educational funds, and to satisfy taxpayers calling for sound results for their invested taxes, educational policymakers must understand, analyze, and wisely dispense teacher pay. A review of how teacher salaries have been organized in the past, how that organization compares to similar issues in the private sector, how both relate to research on motivation, and what this all means for differentiated pay for teachers in the future should be of grave concern to politicians, taxpayers, and educators alike.

Education has entered an age of accountability. In 1983 the U. S. Department of Education published *A Nation at Risk: The Imperative for Educational Reform* (National

Commission on Excellence in Education, 1983). This report criticized the American education system, calling it mediocre and suggesting that this mediocrity was a threat to national security. Since 1983 when the U. S. Department of Education and the National Commission on Excellence in Education published *A Nation at Risk: The Imperative for Educational Reform,* educators have been implementing the recommendations set forth in that document. Those recommendations included rigorous and measurable standards for student achievement and insisted that citizens hold educators and elected officials accountable for reform (Edwards & Allred, 1993; Mathers, 2000, 2001; National Commission on Excellence in Education, 1983). Continuing this national emphasis on education reform, President George H. Bush and the governors of all 50 states held an Education Summit in 1989 and produced Goals 2000. The governors and President committed themselves and their offices to be held accountable for reaching these education reform goals by the year 2000. Bill Clinton, one of the governors at the Education Summit, followed George H. Bush as President and continued the commitment to education reform by helping adopt the Goals 2000: Educate America Act (Ryan & Cooper, 2004).

The national urgency to keep America's education system strong did not end in the year 2000. President George W. Bush declared education as a major initiative in his administration and helped pass the *No Child Left Behind Act* (2001). This legislation called for high standards, qualified teachers, and emphasized accountability for the education of minority groups. As a result of the *No Child Left Behind Act*, all 50 states now have clearly stated standards for student performance and state tests that insure that all children are being educated to those standards (Hodge, 2003). When complete, state

accountability systems have five major components (a) standards, (b) assessments, (c) multiple indicators, (d) rewards, and (e) sanctions (Mathers, 2001). Some form of reward and punishment is implied or stated by state legislatures to enforce the written standards. Students' scores are published by local newspapers and on the internet where they can foster a sense of pride or embarrassment. The results are high stakes not only for students but for administrators and teachers as well. Surrounded by this high stakes climate of accountability, policymakers are wise to consider how teacher pay can be used for positive impact on education reform. The thoughts and opinions of teachers about their pay and how teacher pay might help advance the goal of increased student achievement are critical elements in school reform efforts.

## Statement of the Problem

For decades policymakers have discussed ways to improve the achievement of minority students and close the gap between minorities and their peers. Experts and commissions are still urgently calling for changes that keep America's educational system strong (Friedman, 2005; National Center on Education and the Economy, 2007; The Teaching Commission, 2004). In *The World Is Flat: A Brief History of the Twenty-First Century,* Friedman (2005) cautions that the United States is not producing enough engineers and scientists and states:

> We are developing an education gap. Here is the dirty little secret that no C.E.O. wants to tell you: they are not outsourcing to save on salary. They are doing it because they can often get better-skilled and more productive people than their American workers. (p. 270)

To insure a strong educational system and close the achievement gap, it is necessary to recruit and retain the brightest students to enter the teaching field. A report from the National Center on Education and the Economy (2007), The Teaching Commission (2004) and The National Commission on Teaching and America's Future (2003) have declared the serious need for effective and highly qualified teachers to improve the quality of education for American students. The *No Child Left Behind Act* (2001) requires a highly qualified teacher in every classroom. The National Commission on Teaching and America's Future (2003) provides data on the attrition rate of teachers in its report, *No Dream Denied: A Pledge to America's Children.*

On the surface, it is tempting to believe that smaller class sizes and teacher retirements are creating a teacher shortage. The data, however, show that teachers are leaving the profession at a faster rate than they are entering. One in three beginning teachers leaves after one year. Almost half of all beginning teachers leave within the first five years. Retiring teachers account for approximately one fourth of those leaving the profession. From these data we see that retaining new teachers is a larger factor than retiring teachers in the battle to maintain a well-qualified teacher workforce. Teachers leaving the profession in 1999-2000 exceeded teachers entering the profession by 23% (The National Commission on Teaching and America's Future, 2003). This attrition rate impacts the quality of teachers.

Multiple commission reports and experts in the field are calling for differentiated pay to help recruit and retain a highly qualified workforce that can teach all American students to high levels thereby strengthening the economic and political fabric of our nation (Goldhaber, 2006; National Commission on Education and the Economy, 2007;

Odden, 2004; Odden & Busch, 1998; The National Commission on Teaching and America's Future, 2003; Schilling & Lawton, 2002; The Teaching Commission, 2004). In *Teaching at Risk: A Call to Action,* The Teaching Commission states "not only that the nation must increase base pay for teachers, but also that teachers must be measured-and compensated-on the basis of their classroom performance, including the academic gains made by their students" (p.16).

To establish differentiated pay structures that are effective, the major stakeholders must be consulted. Teacher views on factors that are acceptable for enhancing their pay and opinions about positive and negative consequences of differentiated pay are a critical element to inform policymakers who design new pay structures. Odden and Kelley (2002) recommend the involvement of teachers in the process of developing a differentiated pay system. The Consortium for Policy Research in Education (2006) recommends continued experimentation and research on the implementation of new pay structures as well as their impact on education to develop a knowledge base that determines effective practices. As differentiated pay is discussed and implemented, there is a need to survey and analyze teacher thoughts and opinions.

## Definition of Key Terms

To clarify the discussion about teacher pay it is helpful to define key terms that will be used. It is noted that teacher pay sometimes involves benefits such as health insurance and retirement benefits. For purposes of this research teacher pay, teacher salary, and teacher compensation may be used interchangeably. The issue of whether these terms include the added benefits associated with the pay is not considered because it does not affect the topic being studied. These added benefits would, however, be an

important part of any discussion directly related to the cost of differentiating teacher pay. The following definitions will guide the discussion and study:

1. Pay for performance provides extra compensation for teachers who perform their duties in an exemplary fashion. This exemplary performance is determined by some form of subjective or objective evaluation. The evaluation may be completed by a supervisor or peer (English, 1983).
2. Results based pay is given when a teacher achieves an intended outcome. An example would be increased student achievement on standardized assessments either local, state, or national (Kelley, Odden, Milanowski, & Heneman, 2000).
3. Differentiated pay is earned by teachers who assume additional duties. These duties typically are perceived as requiring more advanced knowledge and skills. These responsibilities frequently entail non-teaching tasks (Edelfelt, 1985; English, 1983).
4. Knowledge and skills based pay is earned by teachers who participate in staff development and demonstrate their increased skill (Odden & Kelley, 1997).

The term differentiated pay will be used to include all four of these types of pay. This term lends itself more easily to including the other three types of pay. It is useful to have a term that is all inclusive as we explore the attitudes and opinions of teachers about their pay.

## Theoretical Framework

The assumption that differentiated pay will improve the quality of teachers in classrooms and will help recruit and retain more qualified teachers is supported by

research on motivation and resulting motivation theories as well as literature on the history of teacher pay. The framework for this research is based on these theories of motivation and the literature on teacher pay.

There are many theories that expand the topic of motivation and how it manifests itself in the workplace. The theories do not contradict each other but approach the topic from different directions. Together these theories provide a clearer picture of teacher motivation. To better understand teacher motivation, it is helpful to divide the theories into two groups. The first group approaches motivation from the perspective of the individual's needs and feelings. This group includes Maslow's (1954) Hierarchy of human needs, McClelland's (1987) discussion about the need for achievement and power, Bandura's (1986) discussion of self efficacy, and Heckhausen's (1991) discussion of anxiety. The second group approaches motivation from the perspective of the individual within the context of the work environment. This group includes motivation hygiene theory, expectancy theory, goal setting theory, participative management theory, contingency theory, and social dilemma theory (Herzberg, 1968; Lawler, 1990; Locke & Latham, 1990; Odden & Kelley, 2002; Pojidaeff, 1995; Vroom, 1964). Each theory will be examined briefly to clarify the complex topic of teacher motivation. Chapter two will explore and discuss motivation theory and its implications for teacher pay more fully.

The literature on teacher pay also provides a framework to discuss the value of differentiated pay. In chapter two, the history of teacher pay is traced to show multiple attempts at changing pay from the traditional single salary schedule based on years of experience and college degree. An examination of the literature shows possibilities for differentiated pay based on three separate areas: extra duties, knowledge and skills, and

student achievement (Darling-Hammond, 2005; Goldhaber, 2006; Hershberg, 2005; Odden & Kelley, 2002). These areas are used to organize the exploration of teacher attitudes and opinions about differentiating their pay. The literature documenting attempts to change teacher pay and the literature presenting current research on teacher pay also indicates both positive and negative results to changing teacher pay. Some issues of concern with changing pay structures include fairness in evaluation and allocation of funds as well as a climate of competition rather than collaboration among teachers (Darlington, 1997; Darling-Hammond, 2005; Desander, 2000; Milanowski, Odden, & Youngs, 1998; Popham, 1997). These issues were considered as the research survey was constructed.

## Purpose of the Study

The purpose of this study is to examine and explain the factors that teachers find acceptable for enhancing their pay. The study will determine which factors, if any, other than years of experience and level of college degree are accepted by teachers. It will also determine whether teachers perceive any negative effects to differentiated pay.

## Research Questions

The following research questions help guide the study:

1. To what extent do teachers find selected criteria acceptable for enhancing their pay?
2. To what extent do teachers perceive favorable and unfavorable consequences to tying their pay to factors other than years of experience and level of college degree?

3. Do years of experience affect the perceptions teachers have about criteria for enhancing their pay?

## Significance of the Study

While the literature reflects many research projects that explore the topic of teacher pay and ways to make it more effective, there is no project that carefully considers the teachers' voice about changing pay structures. Researchers continue to recommend that any attempt to change teacher pay should include the input of teachers (American Association of School Administrators, 1983; Consortium for Policy Research in Education, 2006; Odden & Kelley, 2002). Teacher opposition is stated as a major reason why past attempts to change teacher pay have failed (American Association of School Administrators, 1983; English, 1992; Hodge, 2003; Odden & Kelley, 2002). Considering the pervasive recommendation that the teachers' voice should be heard and considered and the evidence that teacher cooperation and approval are necessary for the success of any teacher pay reform, research directly targeting their attitudes and opinions is critical to policymakers.

This research study strives to describe and explain the views of teachers about differentiated pay. The study targets teacher views in two major categories: 1) criteria that teachers find acceptable to enhancing their pay and 2) attitudes and views about the positive and negative effects of differentiating teacher pay. It examines criteria that have been recommended and tried by researchers to differentiate teacher pay. These criteria include teacher performance evaluations and student achievement data as well as the traditional years of experience and level of degree. The study also examines whether teachers perceive some of the consequences of differentiated pay to be positive or

negative. Research has shown that often differentiated pay produces results that can be viewed as negative as well as positive (American Association of School Administrators, 1983; Darling-Hammond, 1997; Desander, 2000; Frymier, 1998; Milanowski, Odden, & Youngs, 1998; Popham, 1997). Examples of positive results include improving teacher quality, attracting more qualified teachers to the field, and rewarding teachers who are effective. Examples of negative results include causing competition among teachers, obstructing collaboration, taking the creativity out of teaching, harming morale, causing teachers to avoid teaching socially disadvantaged students or students who speak a language other than English. Responses from teachers in these two areas of criteria acceptable to enhance their pay and positive and negative consequences of differentiated pay will be analyzed, described, and explained. Teacher views are then analyzed to see whether background variables like gender, race, years of experience, degree, and age correlate in any particular way with these views. A multivariate statistical analysis is used to identify and describe these correlations.

The information obtained is useful to policymakers who design teacher pay reform. The results of the study help inform school systems about how teacher pay can aid in recruiting and retaining the best candidates into education.

## Method

Survey research, using a Likert scale, was used to collect the data. The 45 item survey was administered to teachers at the elementary, middle, and high school levels. The responses were "subjected to an aggregated analysis to provide descriptions of the [respondents] in the sample and to determine correlations among different responses" (Babbie, 1990, p. 36).

Survey research was chosen because "survey data facilitate the careful implementation of logical understanding" (Babbie, 1990, p.41). Babbie also suggests several other advantages of survey research that make it a good choice for this study:

1. Analyzing the data can help determine causal relationships and simple correlations.
2. From the sample, generalizations can be made to the larger population of teachers.
3. Once data are collected the data can not only be analyzed immediately but also can be analyzed later as differentiated pay evolves.
4. Survey research also lends itself to easy replication. Future similar research can be compared to this study to build a knowledge base about the effectiveness of differentiated pay.

The analysis will help determine the level of acceptability teachers express for having their pay tied to such areas as extra duties, knowledge and skills, and student achievement. It will examine their beliefs about positive and negative effects of differentiating teacher pay. The analysis will also examine any correlation between background variables like gender, ethnicity, age, and years of experience to specific opinions and attitudes.

Chapter One has included the statement of the problem, definition of key terms, theoretical framework, purpose of the study, research questions, significance of the study, and method. Chapter Two will review current literature on the history of teacher pay, motivation and teacher pay, teacher pay reform efforts, unintended results of linking teacher pay to student achievement, and current suggestions for teacher pay structures.

Chapter Three will discuss the method of the study including the theoretical framework, the measurement framework, the instrumentation, the sample, validity, reliability, data collection, data preparation, and the limitations of the study. Chapter Four will report the research findings and present the data. Chapter Five will analyze the findings, the implications of the findings, and further areas of research.

# CHAPTER 2

## REVIEW OF THE LITERATURE

The purpose of this study is to examine and explain the factors that teachers find acceptable for enhancing their pay. Before examining the factors that teachers find acceptable, it is helpful to briefly review current policy trends and recommendations as well as examine the history of teacher pay and the influences that motivate teachers to perform their jobs well. An examination of teacher pay reform efforts, unintended results of linking teacher pay to student achievement, and current suggestions for teacher pay structures will also improve the understanding of factors that teachers find acceptable for enhancing their pay.

The most recent policy trend in education is one of accountability. We have moved from the Excellence Movement of the 1980s and the Restructuring Movement of the 1990s to The Age of Accountability now for the 2000s (DuFour & Eaker, 1998; Nevi, 2002). As experts discuss teacher accountability, they also discuss teacher pay structures. The No Child Left Behind Act calls for qualified teachers in every classroom. Qualified teachers will require pay commensurate with their level of competency.

In its report, *Teaching at Risk: A Call to Action*, The Teaching Commission (2004) has called for changes in teacher pay structures. The Teaching Commission's stated goal is to "raise student performance by transforming the way in which America's public school teachers are recruited and retained" (p. 5). The Teaching Commission's recommendation is that a significant percentage of teachers' total compensation should

be based on improvements in student achievement and that individual teacher evaluations should be frequent and comprehensive (Cochran-Smith, 2004; The Teaching Commission, 2004).

Recent reports have found that one in three teachers leaves the profession within the first three years and almost half leave within the first five years. Our nation is experiencing a crisis in teacher retention. Some might think that smaller class sizes and teacher retirements are causing the shortage. The fact is that since 1990 colleges and universities are graduating enough teachers to meet demands, but too many of them are leaving within the first three to five years (National Center for Educational Statistics, 2006; The National Commission on Teaching and America's Future, 2003). Effective school reform demands that we replace these teachers with the best and brightest. To attract the best and retain them, the teaching profession must be financially rewarding and intellectually satisfying (Goldhaber, 2006; Hershberg, 2005; The National Commission on Teaching and America's Future, 2003).

## History of Teacher Pay

The most often used method of teacher pay since early in the twentieth century has been the single-salary schedule. It is so resilient that Odden (2000a, p. 361) calls "the 'steps and lanes' of the teacher salary schedule the DNA of teacher pay." In this model, a teacher's pay is determined based on years of experience and degree of educational units. Each year the teacher can expect to receive a small pay increase for having one more year of experience. If the teacher enrolls in a college or university and completes the requirements for an additional degree, that teacher is granted a pay increase for increased knowledge. In general, the single-salary schedule can be defined as providing salary

increments according to a teacher's years of experience and number of college or university units or degrees (Odden & Kelley, 2002). To provide another viewpoint, the schedule attempts to measure all teachers in the system by the same scale, whatever elements may be included, and pays them accordingly (Morris, 1930).

The first reference made to the single-salary schedule may be traced to the President's Address in *Addresses and Proceedings of the National Education Association,* Madison, Wisconsin, 1884. In his address, President Bicknell claimed that the pay schedule would attract the best talent and lay the foundation for a permanent rather than a floating profession (Bicknell, 1884). In 1925, 91 cities were using the single salary schedule and by 1927 that number had risen to 165 cities in 35 states (Morris,1930). The first schedules were grade-based or position-based. In general, high school teachers were paid more. Men were paid more than women, and whites were paid more than blacks (Cramer, 1983; English, 1992; Odden & Kelly, 2002). The move from a rural to an urban society and the influences of the industrial revolution caused leaders in education to pursue a more scientific approach to educating children. Teachers were required to receive more training and pass exams for a license (Odden & Kelly, 2002). More and more children were attending school instead of working on farms. Schools began to organize their students by age and ability with a more structured curriculum. All of these influences provided for an increase in the level of pay as well as uniformity and equity within the single-salary schedule. Blacks and women became increasingly assertive and soon gained the exact same single-salary schedule for all teachers regardless of race, sex, or grade level taught (English, 1992; Hodge, 2003, Odden & Kelly, 2002).

Advantages of the single-salary schedule include minimizing friction among teachers and ease of administration for the board of education and county staff members. The single-salary schedule is objective and predictable (Stronge, Gareis, & Little, 2006; Ruml & Tickton, 1955). It allows teachers to make comparisons across school districts as they determine where they would like to teach. Unlike many forms of merit based pay, the single-salary schedule has a positive history of funding. Attempts at merit based pay in the past have been curtailed because of funding. Merit based pay can fluctuate since it has to be earned each year. With the single salary schedule teachers can be confident that they will receive a given pay for years to come allowing them to budget for the future. The single-salary schedule assumes the following:

1. Teaching assignments are equal in difficulty.
2. More education and experience make a better teacher.
3. Salary variations are unnecessary and undesirable.

Not everyone agrees with these assumptions. Policymakers, teachers, and researchers are examining and discussing these assumptions (Keller, & Galley, 2003; Stronge, Gareis, & Little, 2006).

An examination of the single-salary schedule as it compares to the salaries found in other professions requiring similar education shows that education does not compete well for talented prospects. For many decades in the 20th century, teaching was attractive to women who wanted to be home when their children came home from school. During this same time period, men were expected to work outside the home, and women were expected to stay home and raise the children. For this reason, teaching salaries were considered supplementary and could be kept less competitive with other professions

(National Center on Education and the Economy, (2007). Table 2.1 shows a beginning salary comparison from 1972-2004. Teacher salaries are consistently the lowest beginning salaries for any of the professions. Higher beginning salaries are crucial to the recruitment of more able candidates into the teaching field.

Table 2.1
*Beginning Salaries for Varied Professional Degrees*

| | 1972 | 1980 | 1990 | 1995 | 1999 | 2002 | 2004 |
|---|---|---|---|---|---|---|---|
| Teaching | $ 6,970 | $10,657 | $20,635 | $24,463 | $26,639 | $30,719 | $31,704 |
| Engineering | 10,608 | 20,136 | 32,304 | 36,701 | 44,362 | 49,702 | * |
| Accounting | 10,356 | 15,720 | 27,408 | 28,398 | 35,555 | 41,162 | * |
| Business | 8,568 | 14,100 | 26,496 | 28,434 | 36,886 | 40,242 | * |
| Liberal Arts | 8,328 | 13,296 | 26,244 | 28,715 | 34,776 | 34,568 | * |
| Economics | 9,240 | 14,472 | 26,712 | 29,484 | 38,234 | 46,744 | * |
| Computer | --------- | 17,712 | 29,100 | 33,663 | 42,500 | 46,495 | * |

* other professions with comparable educational degrees $40,472.
Source: American Federation of Teachers, (Odden & Kelley, 2002; Stronge, Gareis, & Little, 2006)

While teacher salaries vary from state to state and district to district, generally teacher pay increased during the 1960s but leveled off in the more recent past. When adjusted for taxes and inflation teacher salaries have not increased at all in the past 29 years. At the same time the years of experience of teachers and their educational level have increased. Therefore, we have a more experienced and educated work force for the same basic pay (Odden & Kelley, 2002).

Efforts to compensate teachers based on merit were tried in Massachusetts in 1908. Many of the nation's school systems followed suit for the next decade (Cramer, 1983; Murnane & Cohen, 1986). With the advent of teacher unions, labor laws, and increased teacher training, a salary schedule was established and merit pay systems were less common. By the 1980s only 4% of the nation's school systems were using a form of merit pay. The single-salary schedule was used by 96% of the school systems (Cramer, 1983; English, 1992; Murnane & Cohen, 1986; Odden & Kelly, 2002).

During the 1980s many experts began to question whether the single-salary schedule was appropriate to support new reforms in education (Matthes & Tollerud, 1990; Odden, 2004; Odden & Wallace, 2003; The Teaching Commission, 2004). The need to recognize good teaching and use staff more effectively called for some educational innovation or change. During the 1970s a movement called differentiated staffing was initiated and offered a type of career ladder for teachers (Edelfelt, 1985; Starr, 1977). The most prominent of the pilot programs were the Temple City, California Differentiated Staffing Project and the Arizona-Mesa Differentiated Staffing Project (Edelfelt, 1985; English, 1983). The differentiated staffing offered smaller class sizes to experienced teachers to allow move individualized instruction to students. The concept of pay differentiation was not included but a sense of increased prestige and advancement accompanied the change in teaching duties. The programs had the negative impact of having the best teachers work with fewer children rather than more children. Because of lack of funding, an over-supply of teachers, lack of support from teacher unions, and the turmoil of school desegregation, differentiated staffing was not sustained (Edelfelt,

1985). Differentiated staffing was the beginning of programs like mentor teacher, master teacher, and career ladders.

The 1980s brought a resurgence of these ladder programs. Some were in the making before the National Commission on Excellence in Education published *A Nation at Risk* in 1983 and others began as a response after the report was published (Chance, Malo, & Pickett, 1988; Edelfelt, 1985; Hartshorn, Prather, & Chance, 1988; Hawley, 1985; Middleton, 1989). The National Commission on Excellence's report criticized the nation's schools as mediocre and suggested that this mediocrity left our country's security at risk from threat by other countries. The reform movements that began as a result became known as the Excellence Movement (DuFour & Eaker, 1998). Making schools excellent meant improving the quality of teachers. To address the concerns of teacher recruitment, retention, and development, several states initiated career ladder programs for teachers during the 1980s including Georgia, Florida, Texas, Tennessee and Alabama ( Brandt, 1990; Chance, Malo, & Pickett, 1988; Cornett, 1985; Luce, 1998; Middleton, 1989). The Carnegie Task Force on Teaching as a Profession made suggestions about rungs of a career ladder during the mid 1980s (Lavely, Berger, Bullock, Folman, & Kromrey, 1990). The Carnegie Task Force recommended four rungs: 1. licensed teacher 2. certified teacher 3. advanced certified teacher 4. lead teacher. Each rung had pay increments. Licensed teachers, the first rung, worked prior to certification. Each rung was recommended to work a 10 month contract year except the lead teacher rung whose salary was based on year-round work (Carnegie Forum on Education and the Economy, 1986).

Probably the most comprehensive Career Ladder Program was the one established in Tennessee. In 1984 the Tennessee Legislature passed the Comprehensive Education Reform Act (CERA) that created a career ladder for teachers. The career ladder was intended to attract, retain, and reward teachers (Brandt, 1990; Chance, Malo, & Pickett, 1988; Cornett, 1985; Furtwengler, 1985; Alexander, 1985). Tennessee's career ladder plan included the 5 steps listed in Table 2.2. Advancement up the Tennessee Career Ladder Program was dependent upon evaluations conducted by a three member team of peers outside the candidate's own school system. A pay increase accompanied each rung of the career ladder. The plan has been praised for its success as well as questioned for its fairness, cost, evaluation procedures, and effect on teacher morale (Alexander, 1985; Chance, Malo, & Pickett, 1988; Furtwengler, 1985; Hawley, 1985).

Table 2.2
*Tennessee Career Ladder Plan*

| Career Level | Years of Experience | Contract Duration |
|---|---|---|
| Probationary | 0 | 10 months |
| Apprentice | 1 | 10 months |
| Career level I | 4 | 10 months |
| Career Level II | 9 | 11 months |
| Career Level III | 13 | 12 months |

The 1980s also ushered in other innovations for merit pay or pay for performance. Mentor teacher or master teacher programs, incentive payments for administrators, and teacher development programs were piloted in multiple districts across the nation

(Cornett, 1985; Hartshorn & Prather, 1988; Richardson, 1994). The Charlotte Mecklenburg Career Development Program was perhaps the most successful of these. While sometimes referred to as a career ladder, the Charlotte-Mecklenburg program placed more emphasis on career development. The assumption was that all beginning teachers would become successful and be rewarded. The process through which teachers moved had two balanced parts, an action-growth plan and peer observations. Evaluation areas included classroom performance, faculty performance, and professional performance. The evaluation system was focused on persuading a local audience of educators that a particular teacher did possess the required skills rather than focusing on a more universal audience or on the negative characteristics of the teacher. Evaluator observers served for two years and then returned to the classroom. The observer/evaluator experience strengthened the skills of the observing teacher. Those improved skills needed to be returned to the classroom (Hanes & Mitchell, 1985; Schlecty, 1985).

The Excellence Movement of the 1980s proved ineffective at improving student performance. The reform efforts of the 1980s did not impact student achievement in any meaningful way (DuFour & Eaker, 1998; National Commission on Teaching and America's Future, 1996). New reform movements in the 1990s concentrated on two areas, standards and site-based decision making. These educational reform efforts became known as the Restructuring Movement (DuFour & Eaker, 1998). In 1989, President Bush called the nation's governors to an Education Summit to discuss the lack of success in education reforms. From this Education Summit came a list of six goals to be reached by the year 2000. The six were named *Goals 2000*. Congress later added two

more goals and under President Clinton passed the law, *Goals 2000: Educate America Act* (DuFour & Eaker, 1998; Sanders & Horn, 1997). These goals called for students in grades four, eight, and twelve to demonstrate proficiency in challenging subject matter. To measure this demonstrated proficiency, clear standards needed to be established for students in the content areas. Another of the goals called for teachers to have opportunities to improve their professional skills. This goal required a clear set of standards for teachers. The work of Charlotte Danielson (1996) that created a Framework for Teaching, The Interstate New Teacher Assessment and Support Consortium, The National Board of Professional Teaching Standards, and The Educational Testing Service's Praxis Exams are all examples of this 1990s movement to provide clear standards for the teaching profession. Coupled with the standards for teachers was the logical thought that teachers who possessed more proficient skills should be paid more. Many states offered increased pay for National Board Certification. The types and amounts of pay were inconsistent. Some districts helped subsidize the cost of National Board Certification; some gave increased pay temporarily. Other districts allowed teachers to move up on the steps and ladders of the single salary schedule when they obtained NBPTS certification. There was some concern that as more teachers achieved National Board Certification, funds would not allow the continued pay supplements (Milanowski, Odden, & Young, 1998; Odden & Kelley, 2002; Odden & Picus, 2000).

The second area of reform in the 1990s dealt with site based decision making. The failure of the Excellence Movement was blamed on the top-down approach to management that dictated to teachers how they were to teach. Research and opinions of

experts in leadership were beginning to recommend site based management, shared decision making, shared planning, and shared responsibility (DuFour & Eaker, 1998; Latzko & Saunders, 1995; Lawler, 1990). The evidence was showing that teachers were more likely to buy into reforms when they were given opportunities to help with planning the reform measures. Research was showing that problems were best solved at the local level. The new trend of collegiality also included a call for continuous professional development. The new trend had an emphasis on group rewards and group learning and accountability. Researchers and experts began to call for performance awards based on schools having met their goals of improved student achievement rather than individual teachers having met certain standards (Kelley, Odden, Milanowski, & Heneman, 2000; King & Mathers, 1999; Odden & Picus, 2000). Past attempts to make teacher compensation help advance educational reform and improve the organizational goals of increased student achievement have called for career ladders. More recent attempts are calling for pay based on increased knowledge and skills that can be demonstrated to improve student performance.

With an emphasis on student achievement and legislation entitled *No Child Left Behind*, leaders in the field of teacher compensation are suggesting changes that promote pay based on performance and results. As we have moved into the 21st century the reform movement is one of accountability. The current trend for accountability and standards-based reform would be better served with a different structure for teacher pay (Odden, 2000b; Urbanski & Erskine, 2000; The Teaching Commission, 2004). Research is beginning to prove that an effective teacher is the major determinant of student academic progress, and policymakers are calling for teacher compensation to promote the

goal of teaching all students to high levels (Milman, 1997; National Commission on Teaching and America's Future, 1996; National Center on Education and the Economy, 2007; Odden & Wallace, 2003; Sanders & Horn, 1998; The Teaching Commission, 2004). The single salary schedule currently used by virtually all districts does not serve the purpose of rewarding the most effective teachers with higher pay. Neither does it help advance educational goals for recruiting, retaining, and rewarding good teaching. Considering the knowledge gained from these attempts at career ladders, current research projects, and the work of experts on education reform, changes in teacher pay structures are more likely to be implemented.

## Motivation and Teacher Pay

Motivation theory is found among the psychology of personality and social psychology literature. Definitions of motivation vary slightly but include the "why" of human behaviors. Why do humans think and act as they do? Motivation theories discuss how behavior is energized and directed (Ramachandran, 1994). Motivation examines why people or animals do or do not originate, choose, strengthen, or persist in certain actions, feelings, or thoughts (Magill, 1998).

Early writings and works on motivation concerned themselves with finding general laws for behavior applicable to both animals and humans that could guide discussions about the motives for behavior. The research was viscerogenic dealing with biological needs. Animal instinct and unconscious drives were thought to determine many behaviors. Meeting these unconscious drives was the motivation for most behavior. Beginning in the 1930s and extending for several decades, Clark Hull (1966) produced works based on animal research that spoke of increasing pleasure and reducing

pain as a general principal for motivation. Sigmund Freud (1936) followed with work that included human research and the human sex drive. Freud purported that biological drives needed to be satisfied to reach homeostasis or equilibrium. His theory stated that humans would seek need satisfying objects to return to equilibrium (Freud, 1936).

While Hull's principle of seeking pleasure and Freud's principle of maintaining equilibrium serve us well as a basis for thought on motivation, the focus for this discussion is the motivation of teachers. There are many theories that expand the topic of motivation and how it manifests itself in the workplace. The theories do not contradict each other but approach the topic from different directions. Together these theories provide a clearer picture of teacher motivation. To better understand teacher motivation, it is helpful to divide the theories into two groups. The first group approaches motivation from the perspective of the individual's needs and feelings. This group includes Maslow's Hierarchy of human needs, McClelland's discussion about the need for achievement and power, Bandura's discussion of self efficacy, and Heckhausen's discussion of anxiety. The second group approaches motivation from the perspective of the individual within the context of the work environment. This group includes motivation hygiene theory, expectancy theory, goal setting theory, participative management theory, contingency theory, and social dilemma theory. Each theory will be examined briefly to clarify the complex topic of teacher motivation.

Maslow's (1954) work created a hierarchy of human needs. A person of great need in all areas will choose behaviors to meet the basic physiological needs for food, water, and shelter first. Once having those needs gratified, the organism is free to experience more social needs. A need for safety comes next in the hierarchy. This need

for safety may be a need for physical safety in children such as safety from animals, the dark, or imaginary monsters. In adults the need for safety may take the form of a need for law and order. When the need for safety is not met, other needs are masked or simply do not emerge. Love, affection, and belongingness needs emerge next. Affiliation with friends and family are crucial to healthy development. The hierarchy proceeds to include the esteem needs that Maslow (1954) divides into two subsidiary sets: 1) the desire for strength, achievement, adequacy, and competency and 2) the desire for reputation, prestige, recognition, attention, dignity, and appreciation. The apex of the hierarchy is the need for each person to do what he is "fitted for". The musician must make music and the poet write poetry. At this level individual differences are great. This desire for self-fulfillment and to become all that one potentially can become is called self-actualization. This need for self-actualization is last on the hierarchy after all other needs of the same intensity are met (Maslow, 1954).

In most cases the basic physiological needs of teachers are met in our society. Except on rare occasions the need for safety has been satisfied. Our purpose is best served then by examining the higher order needs of Maslow's (1954) hierarchy that include belonging, self esteem, and self actualization. Teachers are motivated by the degree to which these needs of belonging, self esteem, and self actualization are met.

McClelland (1987) was more interested in the individual differences that influenced motives. He organizes motivation theory into four basic categories. They are achievement motivation, power motivation, affiliative motivation, and avoidance motivation. He blends motivational concepts with personality psychology reminiscent of Maslow's self-actualization needs. Different people have different talents and needs. He

discusses the need for achievement, power, and affiliation. Studies show that offering people extrinsic rewards for doing intrinsically interesting things often decreases their tendency to continue doing the intrinsically rewarding task (McClelland, 1987). These findings might seem contrary to common thought. More logical thinking might cause us to think that coupling extrinsic motivation forces with intrinsic ones helps insure success for an organization.

A person's belief in his own ability to complete a task or attain a certain goal is called self-efficacy. Persons with high self-efficacy tend to set high goals for themselves and are motivated to attain them. Teachers who perceive that they can make a difference when they teach students set higher goals for themselves and their students and are more likely to be persistent when faced with obstacles. Teachers who perceive that they cannot make a difference tend to put forth less effort because trying hard and failing hurts self esteem. Self-efficacy is rooted in past experiences of success or failure and can also be affected by watching the success of others or receiving feedback from others (Allinder, 1995; Ashton & Webb, 1986; Bandura, 1997).

An investigation of motivation must also include a discussion of anxiety and how it affects the initiation, intensity, and perseverance of behavior. We have often heard the maxim, success breeds success. The opposite, failure breeds failure, might also apply. If we assume that success is associated with less anxiety and that failure would bring high anxiety, we might postulate that anxiety would interfere with most behaviors and decrease motivation. Most research tends to show that high anxiety can actually help individuals with easy tasks but inhibits more difficult tasks. Low anxiety seems to help

individuals excel at more difficult tasks (Heckhausen, 1991). Determining the appropriate level of anxiety would be crucial to motivating teachers.

Each of these theories that deals with an individual's needs and feelings helps provide a context for understanding how differentiating pay might affect the motivation of teachers. These theories also provide a context for understanding the positive and negative effects that differentiated pay might have.

Herzberg's (1968) motivation hygiene theory lends itself to practical application for education. Herzberg very effectively discounts many of the seemingly effective methods for motivating employees that have been used historically. He readily discounts the kick in the pants (KITA) mentality as well as multiple myths about motivation. Herzberg (1982) advocates management by motivation not management by movement. The kick in the pants philosophy often causes movement, but a moved worker doesn't move very far before he must be moved again. A motivated worker exhibits continued and sustained behaviors that fulfill basic human needs. Instead Herzberg explains the results of his examination of events in the lives of engineers and accountants, which resulted in the motivation-hygiene theory. Herzberg's original research has been replicated using a wide variety of populations giving added credibility to his postulations.

Herzberg (1968) discounts the KITA approach psychologically as well as physically. Obviously a literal, physical kick from a supervisor would be inappropriate. Psychological kicks, however, are more prevalent in the work force. The cruelty is not visible and can be denied. The one delivering the kick can pretend to be above it all and sometimes feels a sense of satisfaction at their one-upsmanship. This behavior may cause employees to acquiesce to superiors but does not create the motivation in the employee

that effective management seeks. Herzberg discusses positive KITA that includes rewards, incentives, promotions, and increased pay. Most people judge this positive KITA to be motivating, but Herzberg says otherwise. He calls negative KITA rape and positive KITA seduction. The negative is unfortunate but the positive allows you to be a party to you own downfall. Each of these methods proves ineffective.

Herzberg (1968) lists multiple myths about motivation. The first that reducing time spent at work is motivating seems logical on the surface, but motivated people spend more time at work not less. Spiraling wages and fringe benefits are sometimes considered motivating, but industry has discovered that both the economic desires and lazy tendencies of employees have insatiable appetites. Human relations training and sensitivity training were thought to help with employee motivation. Both employers and employees were trained but with only temporary gains. Next the prevailing theory was that employees did not appreciate what was being done for them. Communication became the key buzzword along with job participation. Let the employees see the big picture and communicate the ideas from employer to employee and vice versa. While these last myths were a move in the right direction, they were still misguided. Herzberg (1968) found out instead that there were multiple factors that were affecting job satisfaction and job dissatisfaction. These factors were a key in motivating workers and are the basis of the hygiene theory.

The first concept that needs clarification to understand Herzberg's hygiene theory is that factors for job satisfaction are separate and different from factors that produce job dissatisfaction. The opposite of job satisfaction is not job dissatisfaction but no satisfaction. The opposite of job dissatisfaction is not job satisfaction but no

dissatisfaction. While we normally think of satisfaction and dissatisfaction as opposites, when it comes to understanding people on the job there are two different needs involved. To motivate workers both job satisfaction must be addressed and then job dissatisfaction must be addressed separately.

Herzberg's motivation-hygiene theory identifies motivating factors that satisfy self-esteem and self-actualization needs, and hygiene factors that help satisfy safety needs and avoid outcomes that hinder self-esteem. Motivating factors that improve job satisfaction include: the work itself, achievement, recognition, responsibility, advancement, and growth.

Hygiene factors that affect job dissatisfaction are different from the ones that improve job satisfaction. They include company policy and administration, supervision, work conditions, and salary. The hygiene factors for job dissatisfaction also include relationships with peers, subordinates, and supervisors, personal life, status, and security (Herzberg, 1968). Herzberg describes a formula for motivation that includes three parts. They are the individual's potential, the individual's opportunity to use that potential, and the individual's intrinsic motivation.

Herzberg's research indicates that policymakers must consider the hygiene factors for job satisfaction and job dissatisfaction when making decisions about teacher pay. His theory about the difference between the movement of workers and the motivation of workers has implications for teacher motivation.

Vroom (1964) emphasized the idea that individuals are motivated by expected outcomes that they value. This expectancy-value model states that a behavior is motivated by the subjective probability of successfully reaching the behavioral goal. The

theory states that three perceptions can affect a person's motivation: valence, instrumentality, and expectancy. Valence refers to the degree to which the individual values the consequences of the specific goal. Instrumentality refers to the connection between achieving the goal and experiencing the consequences. Expectancy refers to belief that the person has about whether he or she can reach the goal (Vroom, 1964). Atkinson and Rotter were also expectancy value theorists. Atkinson and Rotter contend that motivation and choice are determined by the values (incentives) of the goals that are available. They also argue that perceptions of the probabilities of attaining these goals affect motivation. In other words, "choice is guided by what one will get and by the likelihood of getting it" (Kazdin, 2000, p.320).

Expectancy theory has implications for teacher pay changes. The changes in pay must be valued by teachers. Any monetary reward or incentive must be a large enough dollar value that teachers perceive it to be worth extra effort. Teachers must perceive that they can and will attain the positive rewards before they will be motivated. Increases in pay or bonuses must be funded in a stable way that will not be affected by a weak economy. Teachers must understand the criteria for receiving a reward and believe they have the skills and ability to meet the criteria.

Goal setting theory states that setting clear-cut, challenging goals and meeting them is a very effective motivating force. Meeting the goal builds self-actualization and self-esteem, both intrinsic motivators (Locke & Latham, 1990). Performance increases have been documented by research when reachable goals are set. This research has focused on individual goals as opposed to group goals and unidimensional quantity goals as opposed to more complex or higher quality goals (Austin & Bobko, 1985). Setting

clear and reachable goals for teachers and rewarding them with increased pay would be motivating based on this theory.

Participative-management theory suggests that highly educated employees are motivated by having a voice in important decisions about organizational objectives and job-specific activities (Odden & Kelley, 2002). Teachers fall into the highly educated category, and research shows they are motivated to higher performance when allowed to share in goal setting and planning (Enderlin-Lampe, 1997; Locke & Latham, 1990). Participative management theory has at its core practices that help employees utilize their own intrinsic motivation to learn, to achieve, to gain esteem, to improve, and to look for better ways of doing things. In the process, productivity improves along with quality and service (Pojidaeff, 1995).

Another theory bearing close resemblance to goal setting theory is contingency theory that states goals should closely fit the basic strategies and characteristics of the organization (Lawler, 1990; Odden & Kelley, 2002). Experts in the field of education are calling for pay to be contingent upon the organizational goal of higher student attendance (Friedman, 2005; National Center on Education and the Economy, 2007; The Teaching Commission, 2004). Schools that have clear expectations for student performance and communicate those effectively to students and staff are more likely to attain their goals. If the goals are too fuzzy or grandiose, success is not as likely. Linking teacher pay to these goals that are closely aligned with organizational purposes and strategies puts contingency theory into practice.

Other theories that have an impact on this discussion of motivation include social dilemma theory that addresses the tendency of an individual to attempt a free ride by

allowing his colleagues to do all the work while he reaps part of the reward (Odden & Kelley, 2002). Since education of students and student achievement is a goal accomplished by more than one teacher, providing individual awards seems unfair. Providing group awards produces the environment for social dilemma theory to become pertinent.

Using these theories, Researchers at the Consortium for Policy Research in Education (CPRE) have created the theoretical framework presented in Figure 2.1 to represent teacher motivation as it is linked to student achievement. The framework implies that teachers will exert more effort, focus, and intensity into their work if they have the opportunity to improve their competencies and are provided the support and resources to attain student achievement goals. The teacher is also more likely to persist with a focused effort if there are consequences associated with their behavior. The consequences may be positive in the form of praise, recognition, or increased pay. The consequences might also be negative. Examples of negative consequences include: not receiving a bonus, increased job stress, or public embarrassment if student achievement goals are made public (Heneman, 1998).

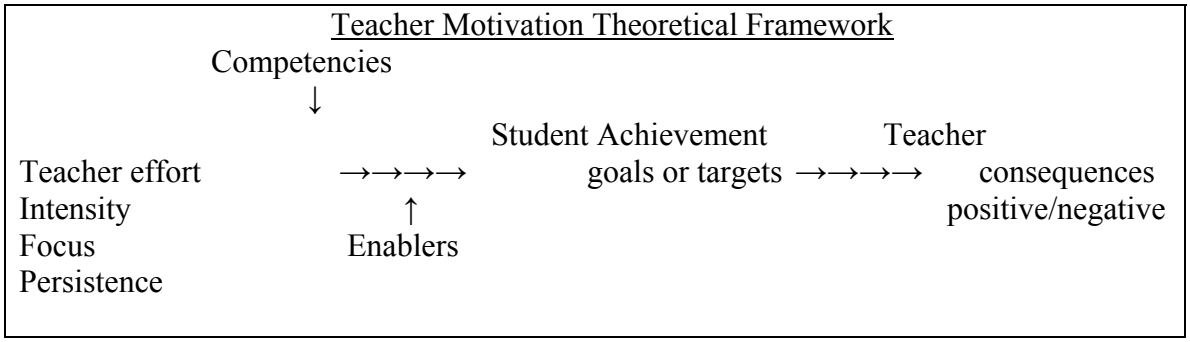


Figure 2.1 *Teacher Motivation Framework*
(CPRE website, 2006; Heneman, 1998, p.45)

Individuals can be motivated both intrinsically and extrinsically. Intrinsic motivation satisfies needs from within the individual. These factors might include Maslow's areas of belonging and affection, self-esteem, and self-actualization. McClelland's needs for achievement and power are another example. Extrinsic motivation comes from a source outside the individual. Money and pay are chief among extrinsic rewards (Herzberg, 1982; McClelland, 1987). The abundance of thought about how teachers are motivated falls into the intrinsic category. Whether asked in a research study or just over casual conversation, teachers share stories of how they have helped to change lives. They relate their joy at helping students learn to read or do math problems. Teachers, especially good teachers, want to make a difference in the lives of young people (O'Neil, Ross, Sawyer & Zakim, 2003). This type of motivation has nothing to do with pay. It is far more powerfully motivating than pay. Increased pay could, however, compliment intrinsic motivation.

Current thought in the business world acknowledges that extrinsic pay for performance seems to be more appropriate for a poorly educated workforce in repetitive factory positions. Incentive pay is less appropriate for highly educated workers who want to influence decisions in the workplace and desire challenging and interesting work (Lawler, 1990). Educators fall into the second group. They are highly educated and frequently choose their career because it is challenging and interesting. Incentive or merit pay for educators might need to possess some new structures to assure that it is effective at motivating teachers to teach students to high standards and not detrimental to teaching.

## Teacher Pay Reform Efforts

Over the past twenty five years several efforts have been made to reform teacher pay. Merit pay continues consistently to be thrown into the public arena as a policy to improve teacher quality (Chance, Malo, & Pickettt, 1988; Edelfelt, 1985; Fuhrman & O'day, 1996; Hartshorn, Prather & Chance, 1988; Hawley, 1985; Henson & Hall, 1993; Middleton, 1989; Odden, 1992, 2000b, 2001; Odden & Kelly, 1997; Odden & Picus, 2000, The Teaching Commission, 2004). These merit pay initiatives have been associated with multiple labels including pay-for-performance, results based pay, differentiated pay, and knowledge and skills based pay. The following definitions will help to clarify these similar but distinguishable forms of pay:

1. Pay for performance provides extra compensation for teachers who perform their duties in an exemplary fashion. This exemplary performance is determined by some form of subjective or objective evaluation. The evaluation may be completed by a supervisor or peer (English, 1983).
2. Results based pay is given when a teacher achieves an intended outcome. An example would be increased student achievement on standardized assessments either local, state, or national (Kelley, Odden, Milanowski, & Heneman, 2000).
3. Differentiated pay is earned by teachers who assume additional duties. These duties typically are perceived as requiring more advanced knowledge and skills. These responsibilities frequently entail non-teaching tasks (Edelfelt, 1985; English, 1983).

4. Knowledge and skills based pay is earned by teachers who participate in staff development and demonstrate their increased skill (Odden & Kelley, 1997).

Over the same period of time these same labels or terms and concepts have been used to create a plan for advancement and promotion along with pay. Each pay reform effort seems to emphasize differing major components somewhat related to these definitions. Under these reform efforts teachers can advance, be promoted, and enhance their pay by exemplary performance determined by one or more of four major components 1. evaluation or performance, 2. achieving predetermined results in their students, 3. performing differentiated duties, or 4. improving knowledge and skills (Odden & Picus, 2000; Odden & Kelley, 2002; Stronge, Gareis, & Little, 2006).

The Career Ladder plans of the 1980s seemed to place a heavy emphasis on determining a teacher's progress up the career ladder and pay scale based on some form of teacher evaluation of effectiveness. Even as current thought declares that effective teachers are the answer to improved student achievement, the process of finding an evaluation system that is fair and works well proves elusive (Cochran-Smith, 2004; Darling-Hammond, 1997; Desander, 2000; National Commission on Teaching and America's Future, 2003; Odden & Wallace, 2003; Reid, 2003). An example is the Tennessee Career Ladder program which began when the legislature of Tennessee passed CERA, The Comprehensive Education Reform Act, in 1984. This legislation made it possible to create a Career Ladder system for teachers. Teachers advanced on that ladder based on performance measured by an extensive portfolio and three days of on-site observation. The process met with extremely negative reaction from teachers the first year. Teachers felt that the evaluation process was too subjective and did not necessarily

document teacher expertise. The process changed somewhat over the next few years. The program was frozen in 1997. Teachers who had already achieved Career Ladder status were allowed to retain it, but no new evaluations occurred (Sanders & Horn, 1997; Milman, 1997).

Other reform efforts have placed the emphasis on producing pre-determined results in their students' achievement to receive increased pay. At times the individual teacher is rewarded for improved student achievement in his own class, and other plans have taken the format of school based rewards for progress made in student achievement by the whole school (King & Mathers, 1999). Arguments have been made to support both the individual and group based rewards. Individual awards have caused teacher morale problems and competitiveness but are more specific in their accountability measures. Group or school based awards encourage collegiality and stronger learning communities but lack the specificity to identify weak teachers (Del Schalock, 1998; Frymier, 1998; Heneman, 1998; Hershberg, 2005; Mendro, 1998; Milman, 1997; Sanders & Horn, 1997; Schilling & Lawton, 2002).

When using student achievement scores to pay individual teachers for being more effective, several methods are being studied. The methods help determine exactly how student achievement is measured for the purpose of showing teacher effectiveness. These methods include the Oregon Work Sample Methodology, the Dallas Value Added Assessment, and the Tennessee Value Added Assessment System (Milman, 1997). Once pay is awarded, the guidelines for its use vary. In some cases the reward could be used by the individual teacher as she chose, and in some cases the monetary reward was used to enhance the school. Other reform efforts have provided for teacher advancement to a

position of supervision or instruction for younger or less able teachers (Heneman, 1998; King & Mathers, 1999, Schilling & Lawton, 20002). Pay incentives offered to individual teachers based on their particular students' achievement data raise the question of validity and reliability of the assessments used. Experts also question whether it is possible to control for the myriad of variables that influence student learning that might not be attributed to a specific teacher (Darling-Hammond & Wise, 1983; Desander, 2000; Walker, 2000).

When considering pay incentives for school based performance awards, data are used from state assessments created as a result of accountability systems developed in response to reports issued by several national commissions and the No Child Left Behind Act (King & Mathers, 1999; Mathers, 2001; National Commission on Excellence in Education, 1983; National Commission on Teaching and America's Future, 1996). The Charlotte Mecklenburg School system has developed a School Based Performance Award (SBPA) program that provides monetary bonuses for teachers and schools that meet performance objectives. This effort met with a somewhat more positive response from teachers than the value added assessment methods. Teachers were provided with clear goals and professional learning on best practices. The teachers were found to perceive themselves as more capable of reaching the stated goals and more likely to receive the expected monetary reward. Their self efficacy was frequently improved (Heneman, 1998; Odden & Picus, 2000).

Differing from the performance evaluation and student achievement criteria for increased pay is the concept of pay for knowledge and skills. Numerous experts in the field of educational policy and research are suggesting ways to link teacher pay to

increased knowledge and skills. Teachers would prove proficiency in knowledge of subject matter, pedagogy, and classroom management as they passed tests created by The National Board of Professional Teaching Standards, The Interstate New Teachers Assessment and Support Consortium, and the Educational Testing Service. Teachers might also receive increased pay for showing proficiency in methods or initiatives of importance to local schools (Milanowski, Odden, & Youngs, 1998; Odden, 2000a; Odden & Kelly, 1997; Odden & Picus, 2000). Examples of these initiatives include methods for teaching second language learners or proficiency in certain subject areas like math and science.

Most recently, Operation Public Education based at the University of Pennsylvania has provided a teacher evaluation method that includes inputs and outputs. The inputs are teacher observations by their peers and the outputs include student learning results. Student learning is measured by value added assessments similar to the Tennessee Value Added Assessment model. Theodore Hershberg (2005) explains the compensation system created by Operation Public Education in the following way.

> The compensation system enables outstanding teachers to earn higher salaries more quickly and is flexible enough to differentiate pay for those difficult-to-fill vacancies associated with particular subjects or less desirable working environments. It provides more fluid career opportunities so that effective teachers can assume greater responsibilities at eariler ages. Teachers who need remediation are required to undergo it, and ineffective teachers who are unable to improve must leave the profession. Professional development opportunities are

substantially expanded so that educators can continue to grow throughout their careers. (p. 279)

Unintended Results of Linking Teacher Pay to Student Achievement

Increasing teacher pay based on improved teacher skills and student performance may affect current policies related to equity and adequacy (Milanowski, Odden & Youngs, 1998; Odden, 2001). It is possible that affluent schools will attract more proficient teachers and have students who have high academic achievement. These schools and teachers would qualify for the extra pay for teachers. Less affluent schools who might need the extra money to attract proficient teachers would have lower achievement scores and not qualify for the extra pay for teachers. These circumstances create a less equitable situation. Overcoming these obstacles may make enhancing teacher pay based on improved skills and student achievement an unreachable goal. Linking teacher pay to student achievement seems to be a natural and logical course of action. The public in general and legislators everywhere are drawn to the idea like a moth to a flame (Popham, 1997). When implemented, however, the process creates many unintended attitudes and actions. The natural desire for any teacher becomes a wish to have the brightest and easiest-to-teach students in her own classroom making it easy to earn the extra pay. Some teachers may have more clout and arrange to have the preferred students. Some teachers have a reputation for being able to discipline well and are, therefore, given the students who may be more difficult to control in the classroom. These more difficult students may or may not do well on standardized tests and may also distract other students in the class causing those students to perform poorly on the test. The desired skill of good classroom management may then be punished with less pay.

Other factors may also affect the linking of teacher pay to student achievement making the process unfair and, thereby, destroying teacher morale. Factors that may make the process unfair include classroom effects like poor student behavior, rooms that are too hot or cold, rooms located in areas of the building that may be noisy and distracting. Circumstances in the personal lives of the teacher like teacher illness, divorce, or family illnesses can also make student achievement a less fair method of determining teacher pay. Exploitive or vindictive school officials who assign specific teachers to less desirable classroom locations or more difficult students must also be noted (Darlington, 1997).

Tying teacher pay to student achievement creates incentives for schools and teachers to avoid the hard-to-teach students. The very students who are the most needy are encouraged to transfer to other schools or are placed in special education classes where their scores will not count. Some are retained in a grade so that their scores look better (Darling-Hammond, 2005).

Effects on teacher attitude and morale must also be noted. Educators feel that the system is unfair to small schools and districts, as well as to low income areas. Small school districts and low income areas must function with fewer resources. Teachers resent being compared to schools and districts with more resources. Schools with high numbers of disadvantaged students and high turnover rates feel that the system does not give credit to the progress that their students are making. Teachers may feel that they are being unfairly targeted as the cause of many educational problems. They are offended that anyone would think that they would only do their job well because of greed or fear of reprisal (Darling-Hammond, 1997).

## Current Suggestions for Teacher Pay Structures

For years the idea for paying good teachers more than bad teachers has been a perceived improvement to the pay structure. Everyone seemed to know good teaching when they saw it and recognized that it resulted in higher student achievement but found it difficult to fairly acknowledge good teaching with pay increases. Implementation of pay for good teaching was cumbersome, unclear, and controversial (Desander, 2000; Milman, 1997).

Currently the Consortium for Policy Research in Education (CPRE, 2006) is studying teacher compensation and has made suggestions for modifying teacher pay structures to align teacher pay with organizational goals and improved student achievement. Their suggestions fall into two categories:

1. pay dependent upon teacher demonstrated skill or knowledge
2. pay dependent upon student achievement.

With so many attempts at changes in teacher compensation implemented and then abandoned, what would make any new attempts more successful? The answer is twofold-improved teacher evaluation and advanced technology for student data. Pay dependent on demonstrated skill or knowledge is more feasible because of the teacher evaluation procedures that have been improved substantially over the past few years. Pay dependent upon student achievement is more feasible because of the state criterion referenced tests included in the NCLB legislation and the computer technology that allows for a quick grading of the test and reporting of results.

Recent work has helped to clarify and measure teacher skill and knowledge. Danielson's (1996) Framework for Teaching, The National Board for Professional Teaching Standards, INTASC (Interstate New Teacher Assessment and Support Consortium), and PRAXIS (Educational Testing Service) are all examples of evaluation tools recently developed. Each of these evaluation plans provides clear observable behaviors and characteristics that describe proficient teaching (Desander, 2000; Milanowski, Odden, & Youngs, 1998). The work of The National Board of Professional Teaching Standards has helped to identify the characteristics of good teaching and train personnel in how to recognize and confirm that those qualities exist in specific teachers. This work by the NBPTS has increased the possibility for new pay structures. The Educational Testing Service has developed assessments for beginning teachers called the Praxis I, Praxis II, and Praxis III. The Council of Chief state School Officers has identified teaching standards for new teachers called the Interstate New Teacher Assessment and Support Consortium (INTASC) standards and is developing assessments to determine if the classroom practice of beginning teachers meets the standard. Charlotte Danielson's book, *Enhancing Professional Practice: A Framework for Teaching,* also offers benchmarks and levels for teacher performance. The work of each of these groups advances the possibility for a new teacher pay structure (Milanowski, Odden, & Youngs, 1998; Odden & Picus, 2000). Teachers can know in advance what behaviors are being rated. There are multiple criteria for each plan and full descriptions of what is expected. The suggestion is that teachers be rated by their peers as well as administrators and that each teacher have more than one rater. Much progress has been made to correct the arbitrary nature of teacher evaluation and to address issues of

unfairness (Frymier, 1998; Milanowski, Odden, & Youngs, 1998; Urbanksi & Erskine, 2000).

Computer technology provides data to us at a faster rate and with more accuracy than ever before making student achievement more viable as an indicator of teacher quality. Tests are being developed that are more reliable and valid for assessing student achievement (Hershberg, 2005; Sanders & Horn, 1997). Almost all of the 50 states have created tests and are establishing standards required for students to be promoted from one grade to the next (Mathers, 2000, 2001). Data from these tests can be evaluated for instructional purposes, used for baseline data, and compared over time to show student progress on the stated objectives.

Recent legislation and technological advances have helped to validate student achievement as a criterion for teacher compensation. The *No Child Left Behind Act* has called for testing to determine if children are meeting high standards. The implementation of these tests yearly and the technology to grade and return results quickly has made tying teacher pay to student achievement more feasible (Hershberg, 2005; Sanders & Horn, 1997). School based Performance Awards for schools who collectively improve student achievement can be administered in a timely manner.

Technology now makes it possible to keep a history of teacher success at promoting student achievement. The scores of students in a teacher's class can be recorded each year for several years providing an accurate history of teacher effectiveness. The common state criterion referenced tests used for *No Child Left Behind* regulations help standardize the measurement year to year. The standardization of these state tests also makes comparison of one teacher to another more valid. Teachers who

have better success could receive better pay. Over the past ten years communication has advanced rapidly. The widespread availability of computers and use of email make it more efficient to report data. Computer programs have been written to organize and store student achievement data in an efficient manner. These advances provide an opportunity to accurately, efficiently, and fairly allocate individual teacher performance awards based on student achievement as well as school based awards.

Teacher unions such as the Teacher Union Reform Network (TURN) have also supported new pay structures for teachers. TURN has a Compensation Redesign Subcommittee that has been working with the Consortium for Policy Research in Education (CPRE) with the common goal of making teacher compensation support a school's strategic goals. TURN districts now have implemented forms of pay for knowledge and skills as well as school- based performance awards for student achievement (Urbanski & Erskine, 2000). This support from unions also provides evidence that change is possible.

Several school districts have experimented with pay based on student performance. They include Teacher Work Sample Methodology used at Western Oregon State College, Dallas Value-Added Assessment System, Tennessee Value Added Assessment System, and the Kentucky Instructional Results Improvement System (Milman, 1997). Each of these has met with varying degrees of success. Currently the University of Pennsylvania is implementing Operation Public Education (OPE) that utilizes the work of William Sanders to determine value added student achievement. Sanders has used a statistical method to determine the growth in student achievement that

can be attributed to the child and that which can be attributed to the educational environment (Hershberg, 2005).

In the realm of skill-based pay as opposed to results-based pay, some researchers have suggested a career ladder that utilizes assessments created by several national organizations like Educational Testing Service, Council of State School Officers, and National Board of Professional Teaching Standards. Table 2.3 shows examples of how a career ladder might be implemented.

Table 2.3

*Professional Benchmarks for a New Teacher Salary Structure*

| Year | Professional Benchmark |
|---|---|
| 0 | Graduation from college and initial licensure |
| 1 | Praxis II Content Test |
| 2 | Praxis II test of Professional Teaching Knowledge |
| 2-3 | Danielson Basic |
| | Praxis III Assessment |
| 2-10 | Danielson Proficient |
| | INTASC Assessment |
| 3+ | Content Master's |
| 5+ | Danielson Advanced |
| | State Board Certification |
| | Minor in second content area |
| | Second licensure in related filed |
| 6+ | NBPTS certification |
| 7+ | Post-board-certification leadership |

(Odden, 2000a; Odden & Picus, 2000).

The table suggests that teacher's careers begin with the Praxis tests. Praxis II tests content knowledge and pedagogical strategies. The Praxis III is a performance-based assessment that is intended to measure basic teaching practices in the classroom. The number of years of experience necessary for these may vary but should range from two to three years. The next step would be to pass the Interstate New Teachers Assessment and Support Consortium assessment for beginning teachers. Over the next years of professional development, teachers might earn a master's degree or pursue licensure in other areas. Some teachers might also want to attempt National Board of Professional Teaching Standards Certification. The NBPTS assessment is a measure based on high and rigorous standards designed for accomplished teachers. It includes portfolios and examples of how teachers would reteach material to students who were not successful. It also includes videotapes of lessons taught by the teacher. About 40% of teachers who attempt certification are successful (Odden, 2000a).

Milanowski, Odden, and Youngs, (1998) offer another general structure for a knowledge and skill-based pay system. While similar in its beginning and ending measures, it calls for locally developed assessments in a teacher's mid-career. The local assessments could help meet the needs that are specific to the school or district. Some districts might want to emphasize reading or math because of low test scores, while other districts might have a need for teachers who could work with second language learners or gifted students. Teachers could move up the career ladder or be rewarded for staff development that taught the particular skill or knowledge needed by the local district or school ( Milanowski, Odden, & Youngs, 1998; Odden, 2000a; Odden & Kelly, 2002). Table 2.4 shows this plan.

Table 2.4

*Knowledge and Skills Based Pay Structure*

| Years of Experience | Assessment Measure |
|---|---|
| 0 | Bachelor's Degree |
| 1 | Praxis III |
| 2 | INTASC |
| 3 | INTASC |
| 4 | Locally Developed Assessment |
| 5 | Locally Developed Assessment |
| 6 | Locally Developed Assessment |
| 7 | Locally Developed Assessment |
| 8 | Locally Developed Assessment |
| 9 | Partial NBPTS Certification |
| 10 | Partial NBPTS Certification |
| 11 | Full NBPTS Certification |

Odden & Kelley (2002) recommend ten key process principles for any teacher compensation system. They include:

1. Involvement of all key parties, especially teachers. The involvement of the public should be restricted and advisory.
2. Broad agreement about the most valued educational results.
3. Performance to be rewarded should be measurable, valid, reliable, and legally defensible.
4. Adequate and stable funding.
5. Quotas should be avoided.
6. Investment should be made in ongoing professional development.
7. The compensation program should be integrated into the human resources system.
8. Administration should develop a history of working cooperatively with teachers and unions.
9. Teacher associations should work with management toward educational goals.
10. A commitment to review and revise until a system is fully implemented.

These recommendations are made as a result of the research conducted by CPRE at the University of Wisconsin-Madison.

After reviewing recent research on teacher pay reforms, Goldhaber (2006) has also made recommendations for successfully implementing teacher pay reform. They include:

- Teacher pay reform is much more likely to be successful if the reform takes place at the state level.
- States must make basic investments in their education data infrastructures.
- More basic research is needed on the data and methodological requirements for using student achievement tests as a gauge of teacher effectiveness.
- States and localities need to engage in a number of pay experiments.

As teacher pay systems are implemented, it is important to remember the complexity of classroom instruction. We cannot forget the unique context of each instructional setting. School level reward systems allow contextual variables to be spread out and are, therefore, more feasible and fair than teacher level reward systems. Some experts believe these contextual variables are too numerous for teacher level evaluations to be useful (Popham, 1997; Darling-Hammond, 1997).

The possibilities of enhancing teacher pay for the most effective teachers are promising. Using teacher pay to improve student achievement is certainly a common theme for educational reform. Only time will tell whether the stakeholders in education will be persistent enough to stay the course and as Odden (1995) suggests review and revise until new pay structures are effectively implemented.

Chapter Two has included a review of the literature in the following areas: history of teacher pay, motivation and teacher pay, teacher pay reform efforts, unintended

results of linking teacher pay to student achievement, and current suggestions for teacher pay structures. Chapter Three will discuss the method of the study including the theoretical framework, the measurement framework, the instrumentation, the sample, validity, reliability, data collection, data preparation, and the limitations of the study. Chapter Four will include the research findings and present the data for the criteria acceptable for enhancing teacher pay, the perceived positive consequences, the perceived negative consequences, the results of open-ended question 33, and the correlation of years of experience to acceptability of certain criteria. Chapter Five will analyze the findings, the implications of the findings, and further areas of research.

# CHAPTER 3

# METHOD

The purpose of this study was to examine and explain the factors that teachers find acceptable for enhancing their pay. The following research questions were used to guide the study:

1. To what extent do teachers find selected criteria acceptable for enhancing their pay?
2. To what extent do teachers perceive favorable and unfavorable consequences to tying their pay to factors other than years of experience and level of college degree?
3. Do years of experience affect the perceptions teachers have about criteria for enhancing their pay?

The purpose of this chapter is to explain the methods used to explore these research questions. Six sections help describe the methodology. They include the theoretical framework, measurement framework, instrumentation, sample, data collection and data analysis.

## Theoretical Framework

The Consortium for Policy Research in Education (2006) recommends the involvement of all key parties, especially teachers, in the planning of any teacher compensation system. Research that helps inform policymakers about the factors teachers find acceptable for enhancing their pay advances this recommendation. A

survey was designed to explore teacher opinions about certain factors of differentiated pay (Appendix A). The framework for constructing the survey included three major factors that could enhance teacher pay: 1) educational degree and experience (credentials), 2) teacher evaluation, and 3) student achievement. The categories were chosen based on the historical basis of teacher pay which is educational degree and experience (credentials), and the less traditional attempts that have been tried for the purpose of reforming teacher pay structures - teacher evaluation and student achievement. The educational degree and experience category is an element of the most prevalent form of teacher pay, the single salary schedule (Odden, 2000a). The evaluation and student achievement categories have been included in experimental attempts at teacher pay reform that have met with limited success (Chance, Malo, & Pickett, 1988; Darling-Hammond, 1997, 2005; Desander, 2000; Edelfelt, 1985; Mathers, 2001; Mendro, 1998; Nevi, 2002; Odden & Kelley, 2002; Popham, 1997; Urbanski & Erskine, 2000). All three categories have been suggested as elements of new pay structures by researchers working with the Consortium for Policy Research in Education (2006). By creating a survey that determined the degree to which teachers agree to tie their pay to these categories, the research can help determine whether teachers are willing to accept new pay structures or if they prefer the traditional single salary schedule. If teachers are willing to have their pay tied to student achievement, the survey might help determine what teacher's find acceptable to measure that student achievement. Research also indicates that differentiated teacher pay can have negative as well as positive effects (Darlington, 1997; Darling-Hammond, 2005; Desander, 2000; Milanowski, Odden, & Youngs, 1998; Popham, 1997). Negative effects include teacher competition, lack of

collaboration, and low morale. Positive effects include improved teacher quality and improved student achievement. These positive and negative effects were considered as the survey was developed. Determining teacher views on the positive and negative effects of changing teacher pay helps inform policymakers as they consider differentiated pay.

## Measurement Framework

The survey was constructed to explore teacher attitudes and beliefs in two broad categories: 1) factors acceptable for enhancing teacher pay 2) positive and negative consequences of differentiated pay. Currently researchers are suggesting that teacher pay be enhanced based on three sub-categories: 1) knowledge and skills 2) student achievement 3) the traditional degree earned and years of experience (Darling Hammond, 2005; Goldhaber, 2006; Hershberg, 2005; Odden & Kelley, 2002). Researchers also discuss both positive and negative consequences of differentiated pay (American Association of School Administrators, 1983; Darling-Hammond, 1997; Desander, 2000; Frymier, 1998; Milanowski, Odden, & Youngs, 1998; Popham, 1997; Solmon & Podgursky, (2000). Table 3.1 shows the categories and elements of the categories used to frame the survey. The survey questions were developed and selected with these categories in mind.

## Instrumentation

The survey was developed, clarified, and refined over time. Table 3.2 lists the steps of the process used to develop the survey.

Table 3.1
*Categories and Elements for Questionnaire*

| Category | Elements in each category |
|---|---|
| Criteria acceptable to enhance teacher pay | 1. Credentials-college degree, years of experience, NBPTS certification<br>2. Knowledge and skills-evaluated by administrator, peer, or parent questionnaire and professional classes<br>3. Student achievement-indicated by scores on standardized tests such as ITBS, state criterion referenced tests, and local common assessments |
| Consequences of differentiated pay | 1. Positive-improved teacher quality and student achievement, improved perceptions of teaching as a career<br>2. Negative-avoidance of hard to teach students, lack of collaboration among teachers, competitiveness, resentment and low morale |

Table 3.2
*Questionnaire Development Process*

| |
|---|
| 1. Prototype Survey Construction |
| 2. Concept Clarification |
| 3. Creation of the Item Pool |
| 4. Refining of the Item Pool |
| 5. Development of Preliminary Field Test |
| 6. Administering the Preliminary Field Test |
| 7. Review of Preliminary Instrument and Results |
| 8. Refinement of Survey Instrument |
| 9. Development of a Pilot Survey |
| 10. Administering the Pilot Survey |
| 11. Review of Pilot Instrument and Results |
| 12. Refinement of the Pilot Survey |
| 13. Piloting the Survey Again |
| 14. The Final Survey |

Prototype Survey Construction

The prototype survey was developed while the researcher was taking a survey research course to complete coursework for a doctoral degree. This prototype survey included three categories: seniority, effort, and student achievement. During this survey research course a beginning item pool list was also developed (Appendix B). The items

were suggested by fellow classmates who had experience in adult education as well as by elementary teachers who worked with the researcher. Some items were collected from earlier readings in relevant literature. The item pool resulted in a prototype survey (Appendix C).

Concept Clarification

In preparation for the actual doctoral research, the survey concepts were clarified. While reading research on teacher pay an attempt was made to find constructs to use as the basis for the survey. In meetings with the professors on the doctoral committee, the constructs in the prototype survey were evaluated, and it was decided that in fact the survey had questions in categories not constructs. Discussions of appropriate names for the categories led to the following possibilities:

- Objective evidence of teacher quality
- Subjective evidence of teacher quality
- Student improvement
- Credentials (college level and years of experience)
- Evaluations
- Student performance
- Beliefs about teacher pay
- Evidence of teaching effectiveness
- Indicators of quality teaching
- Incentives for quality teaching
- Beliefs about teaching

The categories of educational degree and experience (credentials), evaluation, and student achievement were decided to be the best framework for answering the guiding research questions rather than the preliminary categories of seniority, effort, and student achievement. These new categories were also more closely related to the work of current research in the field of teacher compensation (Darling-Hammond, 2005; Milanowski, Odden, & Youngs, 1998; Odden, 2000a, 2001, 2004; Odden & Kelley, 2002).

## Creation of the Item Pool

The item pool was an ongoing work with input from the research, colleagues, and the doctoral committee members. To assure content validity multiple expert sources in the field were consulted as items were created. The sources included practitioners in the field of teaching as well as graduate students and professors at the University of Georgia. Sources also included written research that was obtained from search engines in the Galileo database. Key terms used included pay for performance, merit pay, and teacher compensation. A list of possible survey questions was kept on the computer and can be found in Appendix D. The list of possible items was reviewed by teachers, graduate students, and professors in the field on several occasions. The use of multiple experts to create and review the item pool list is recommended by Huck and Cormier (1996) to assure content validity. Compiling the list over time helped to avoid researcher bias and also the asking of questions in ways that might bias the responses. Babbie (1990) cautions, "You must be continually sensitive to the effect of question wording on the results that you will obtain" (p. 131). Creating items over a period of time was an effective way to avoid items that were a temporary focus of the researcher or were heavily influenced by the researcher's opinion. As researcher knowledge of the field of teacher compensation grew, the focus of items would reflect the mindset of the researcher. At meetings with Dr. Sielke and Dr. Valentine, these mindsets and opinions were discussed, and the item pool progressed to include more and more options worded in several different ways.

## Refining the Item Pool

In meetings with both the major professor, Dr. Sielke, and the methodologist, Dr. Valentine, the item pool lists were examined to see if they accurately reflected the chosen categories of teacher degree level and experience, teacher evaluation, and student achievement. If any areas were weak or irrelevant, the professors suggested areas to research, include, delete, or consider. As content was discussed, so was the wording of the survey questions. Experts in survey research recommend that respondents be able to read an item quickly, understand what it is asking, and answer without difficulty (Babbie, 1990; Salant & Dillman, 1994). In keeping with these recommendations, the same stem was used to begin each item of the survey. The beginning of each item was worded as follows: "Teachers should be paid more if …"

The preliminary survey included 12 items rated with a Likert scale of one through four. The decision to use an even number of responses was intended to force an answer that was not neutral. One open-ended question was used to allow for any comments or ideas not covered in the previous 12 questions. Background information questions completed the survey document to allow for an analysis that compared results based on background variables.

## Developing the Preliminary Field Test Questionnaire

Once the survey items were refined, three sample surveys were created and reviewed by Dr. Sielke and Dr. Valentine. Babbie (1990) explains that survey researchers should pay close attention to the format of the survey when he states, "The

format of a questionnaire can be just as important as the nature and wording of the questions used" (p. 135). He recommends, "You should maximize the 'white space' in your instrument" (p. 135). The three sample surveys may be found in Appendix E. Survey Sample One was chosen as the best by both professors and the researcher. It was chosen because it clearly stated the questions and could be read and answered quickly without confusing or misleading the reader. Samples two and three were more difficult to comprehend and did not make responding easy. As recommended by Babbie (1990), the survey included some general background information and specific instructions for the respondents. Survey Sample One became the Preliminary Field Test survey instrument and can be found in Appendix F.

Administering the Preliminary Field Test

The preliminary field test survey was administered to 16 students in one of Dr. Sielke's graduate school classes. The 16 students consisted of educators from various backgrounds and levels of degree and experience. The range of college degree extended from Bachelor's Degree to EdD. The years of experience ranged from one to 22. Job titles included administrators, special education, and migrant education. A codebook for the open ended items of the survey can be found in Appendix G. The researcher attended the class to pass out the questionnaire. The researcher was introduced and gave a brief description of the purpose of the study. The students responded to the questionnaire in less than 15 minutes. Time was allowed for questions and comments after students had finished the survey. Two specific recommendations were suggested by the group. They included using an odd number of responses to the Likert scale to allow respondents to be neutral on some items and offering choices for race/ethnicity rather than leaving the

response open-ended. Both items on the survey had been considered and purposely written in the format used. Respondent concerns were addressed by explaining the reasons for writing the survey instrument as presented to them. Some discussion followed the survey about whether these particular subjects would prefer being evaluated by a peer or by an administrator. The discussion took place after the survey was completed and did not include any suggestions for the survey document. A list of the open-ended responses to the survey can be found in Appendix H.

Review of the Preliminary Field Test and Results

The Preliminary Field Test pilot instrument performed as expected. The respondents read and understood the items easily. The sample group was able to complete the survey in an acceptable amount of time. A data problem list for the survey can be found in Appendix I. The results of the survey were examined to determine if there were any indications that the survey might not be valid or reliable. The examination looked for irregularities in the responses that would raise questions about validity and reliability. Examples include whether some of the questions elicited responses that might be in contradiction to one another from the same respondent, whether all the responses were skewed in one direction or the other, or whether responses tended to fall too heavily at one spot on the scale to allow for the results to be meaningful. The rating scale showed a normal distribution of response that would allow a comparison of differences. Responses to the items ranged from one to four as expected. Dr. Valentine ran an analysis of the results of the pilot survey to determine that the survey showed an acceptable level of validity.

Refinement of the Questionnaire

The instrument performed so well that few if any changes or refinements needed to be made to the survey although a new interest in the positive and negative results of changing teacher pay was developing within the researcher. This new interest and those changes will be discussed later. The only change to consider for the final survey would be whether to change the rating scale to allow for a wider range of agreement or disagreement with the statements. Since two members of the pilot study group requested an opportunity to mark a neutral response, changing the range of response to one through six as opposed to the current one through four might allow a more accurate determination of teacher attitudes and beliefs about what they find acceptable for enhancing their pay. The request of the two pilot study group responders to have a neutral choice was not considered since the purpose of the research is to force at least a somewhat positive or negative response.

As mentioned earlier, a clearer view of positive and negative consequences of differentiated pay was developing within the researcher and became a subject of conversation as the survey was being reviewed. To address the question of positive and negative results that might result from differentiated pay, a new item pool was begun. The research of Solmon & Podgursky (2000) was used to begin a list of possible survey items that would help determine teacher attitudes about differentiated pay. These new items would define and describe more specifically positive and negative consequences of changing the traditional single salary schedule. The list of items generated for this new section of the survey can be found in Appendix J. Once again these items were reviewed by teachers, professors, and administrators to determine their appropriateness in wording

and content. Plans were made to pilot this survey that included a new section on the positive and negative results of differentiated pay.

### Piloting the Questionnaire Again

The questionnaire was piloted again at the elementary school where the researcher works with approximately 60 questionnaires being distributed at the end of a faculty meeting. The principal commented that the questionnaire was related to the researcher's dissertation and then read the Directions for Administration. Twenty-nine questionnaires were returned that day and five were returned at a later date. The Directions for Administration of the survey asked that teachers complete the survey at the faculty meeting and place it in an envelope. Many teachers were ready to leave the meeting and asked if they could return the surveys later. Teachers were told that they could return the survey later. The data were analyzed with SPSS computer software to once again check for consistency, validity, and reliability.

### The Final Questionnaire

The questionnaire was reviewed a last time by the researcher and each member of the committee. Several sentences were moved to different paragraphs in the cover letter to keep it concise and clear. Questions eight and nine were reversed to keep the two questions about criterion referenced tests next to each other. This switch helped to make the questions more logical for the reader. Questions 17 and 18 were reversed to show a progression that teachers would either change their practice or leave the profession. This too made the questionnaire more logical for the reader.

Questions 30 and 31 were deleted. The issues of teacher evaluation and standardized testing as it pertains to teacher pay had been appropriately covered in

section one and the questions tended to move the research into an unintended arena of debate. Questions 34 and 35 were deleted because responses to them did not clearly align with the purpose of the research.

One sentence in the introductory paragraph of the questionnaire was deleted to streamline the directions for the respondents. Items 28, 29, 30, 37, 39, and 40 were slightly reworded for clarification.

The Final Questionnaire (Appendix A) included 45 items in three basic sections. The original categories of educational degree and experience (credentials), evaluation, and student achievement made up the first section. A second section included positive and negative results of differentiated pay, and the third section contained the background variable information.

## Validity of the Questionnaire

As the survey instrument was developed, careful attention was paid to the concept of validity. The validity of this instrument rests on three major factors: 1. the source of the items 2. critique by experts and 3. the piloting process.

Babbie (1990) explains content validity as "the degree to which a measure covers the range of meanings included within the concept" (p. 134). To assure that the survey covered the range of meanings in the concept of differentiated pay, the researcher carefully and thoroughly examined both historical and current research in the field of teacher pay. Chapter two contains a history of teacher pay that explains teacher pay in the United States from the beginning of common schools in the 1700s to the present. The literature review also included past attempts at changing teacher pay structures and

current trends in teacher pay. This thorough review of teacher pay helps insure that the survey instrument includes the proper range of items.

Frequent discussions with experts in the field of education and teacher pay also helped with determining the full range of items to be included. Huck and Cormier (1996) recommend having "experts carefully compare the content of the test against a syllabus or outline that specifies the instrument's claimed domain" (p. 89). Professors, classmates, and co-workers all had input into the questionnaire items. The instrument was developed over a three year period which allowed many different classmates and co-workers to have input.

Since the survey was developed with multiple revisions including a prototype survey, a preliminary survey, a pilot survey, and a final survey, there were many opportunities for experts to review the question wording and content. The use of an open-ended question with each survey allowed for a wide range of respondents to have input.

Construct validity refers to the way "a measure relates to other variables within a system of theoretical relationships" (Babbie, 1990, p.134). The purpose of this study was to examine each item independently. There was no need to see a relationship within the items of the study. The internal consistency of the survey is not relevant and no attempt was made to determine its validity.

## Reliability of the Questionnaire

The reliability of the survey instrument was also considered as it was created. Babbie (1990) suggests that to create a reliable measure you "Ask people only questions they are likely to know the answers to, ask about things relevant to them, and be clear in

what you're asking" (p.133). Several assumptions are being made with this study. The researcher is assuming that the teachers will find teacher pay relevant and will answer the questionnaire honestly. The development over a length of time that included a prototype survey, a preliminary field test survey, a pilot survey, refinement of the pilot survey and a final pilot has helped to assure that the survey items are clear in what they are asking. With each new survey created, SPSS was used to run an analysis of the data collected. The rating scale showed a normal distribution of responses. Attention was paid to whether responses fell in a manner that would be meaningful. The results were not skewed heavily for any particular item. The analysis determined an acceptable level of reliability.

Because this research is based on an item level analysis, there is no need to examine consistency between items on the questionnaire. Independent judgments about each item were being researched, and there was no expectation of a high or low correlation among items.

No attempt was made to discover test-retest reliability. The study seeks to determine the attitudes and opinions of teachers at this point in time. As stated earlier, the researcher assumes that the teachers find teacher pay relevant and answered the questionnaire honestly. Multiple pilots of the questionnaire assured that the questionnaire items were clear in what they were asking. For these reasons test-retest reliability is not relevant to this study.

## Sample

The population of interest for this study includes certified K-12 teachers. Administrators and paraprofessionals were intentionally excluded from the sample. To

insure that teachers from all academic levels K-12 were included, two high schools, two middle schools, and two elementary schools were chosen. The schools were located in a large suburban district in the metropolitan Atlanta area. The schools were chosen for the convenience of their location. The process of gaining access to the schools and securing permission from the principals was easier at these sites because the researcher was an employee of the school system. The researcher did not have any direct personal or supervisory relationship with any of the subjects who completed the survey.

Each school employed 90-250 certified personnel. Using a formula developed by the research division of the National Education Association and placed in a table by Krejcie and Morgan (1970), it was determined that 384 surveys would provide a sample that could be generalized to the general population of teachers in large, suburban school systems. Salant and Dillman (1994) indicate that not all teachers asked to participate would complete the survey. Therefore, an estimate of 600 surveys was used as a sample size. Stratified sampling was used to ensure that all subgroups of teachers were represented accurately. Choosing two elementary, two middle and two high schools ensured that all grade levels K-12 were represented appropriately (Scheaffer, Mendenhall, & Ott, 1996). The intent was to collect approximately 200 elementary school surveys, 200 middle school surveys, and 200 high school surveys. In requesting permission from principals to administer the survey, permission was actually received from two elementary, two middle and three high schools.

## Data Collection

The researcher personally traveled to the data collection sites to supervise the completion of the surveys. The following procedures were pre-determined to facilitate data collection:

1. Permission to conduct the study was requested from the Institutional Review Board of the University of Georgia
2. Permission was acquired through the Gwinnett County Research Process
3. Potential sites for data collection were determined
4. The consent of the administrators at each school was obtained by sending a request letter (Appendix K)
5. A date and time was scheduled for the researcher to deliver the surveys and directions for administration
6. A cover letter to participants was written to accompany the survey (Appendix L)
7. The survey materials were personally delivered by the researcher
8. A school administrator or monitor read the Directions for Administration
9. The surveys were marked by teachers
10. Teachers placed the surveys in large collection envelopes
11. The researcher collected the envelopes

As the data were collected, these procedures were modified slightly. For two schools the procedures were followed as written. The limited amount of teacher time in faculty meetings made some principals unwilling to allow for the collection of the surveys by the researcher. For three schools, the procedures were followed through step seven, but the surveys were collected by school personnel after the researcher left the building. In the larger high schools, there was never a joint faculty meeting with all teachers present. In these cases the standardized directions were printed and attached to the survey. An email was sent by an administrator giving the standardized directions. For these two schools the surveys were placed in mailboxes and returned by courier a few days later. The researcher did make a personal visit to these schools and helped place the

surveys in mailboxes. The schools were visited and questionnaires collected between August, 2007 and January, 2008.

The respondents were told that their responses were voluntary and anonymous. No information collected could identity an individual with his/her response. The Directions for Administration (Appendix M) were written by the researcher and read by the administrators who assisted with the data collection or emailed to their teachers in the instances mentioned previously. These directions, read verbatim, helped standardize the administration and avoid any bias that might result from comments made at different locations.

The data collection was done with the researcher personally attending the schools to help increase the response rate and the speed of data return. If the surveys had been mailed, the return rate would have been smaller and slower. Personal delivery, supervision, and collection at the site made the research more efficient and effective.

## Data Preparation

The questionnaires were consecutively numbered as they were returned, and the responses entered into an Excel spreadsheet. A codebook (Appendix N) was developed as a reference for coding the responses in the spreadsheet. As the questionnaire data were entered into the spreadsheet, a data problem list was created (Appendix O). If there were any questions about how to code the data, any irregularities in the surveys or any comments or marks placed beside the survey questions, they were listed in the data problem list.

The data were then subjected to a data cleaning process that included reviewing the data problem list and running frequency tables to assure the logical possibility of the

data results. The data problem list was reviewed by both the researcher and methodologist, Dr. Valentine. Each item that might have been questionable for coding was discussed. If Dr. Valentine or the researcher had doubts about the coding that item was eliminated from the valid results. On multiple occasions respondents had circled two consecutive numbers for an item. The item was coded as the midpoint between the two numbers. When respondents wrote comments next to their response to the item, the comments were analyzed to make sure they were consistent with the score the respondent had given. On one occasion, the response indicated that the sample subject was interpreting the question in the wrong way so that response was eliminated. The frequency tables were reviewed to confirm that the coded results were indeed possible and likely for this sample population and questionnaire. Any item that looked inaccurate or inconsistent was reviewed and eliminated from the data.

The study was limited to teachers and all surveys that were completed by administrators, paraprofessionals, and other non-certified personnel were purposefully removed from the data. After removing these questionnaires, 548 surveys were considered valid for the study.

Several items were recoded to aid in analyzing the data. Item means were used to rank the criteria and compare positive and negative outcomes. To make the comparison accurate, the scale for the negative statements on the questionnaire had to be reversed to be consistent with the scale for the positive statements. Items 23 through 32 were negative outcome statements and were recoded to become consistent with the positive outcome statements. For these items the scale was reversed so that a score of one became agree and a score of six became disagree. Item 34 was also recoded. The item asked,

"In what year were you born?" The data were recoded to indicate the age of the respondent. This recoding helped with analyzing the data.

Item 33 was an open-ended question asking for additional comments about differentiated pay. About one third (34%) of the respondents answered this question (n=189). The comments are listed by respondent number in Appendix P. Each comment was examined and rated as either positive, negative, mixed response, or neutral. The mixed response category consisted of comments that had both a positive and negative component.

## Data Analysis

Following the data cleaning process, the data were entered into the statistical software package SPSS. The frequencies, means, and standard deviations were determined for each item. To answer each research question the following statistical procedures were used:

1. To what extent do teachers find selected criteria acceptable for enhancing their pay? The mean for each item was calculated and each item was ranked by the mean score to show the degree to which teachers agreed with each statement. The means were subjectively compared for notable differences rather than using a statistical analysis such as a t-test or chi squared. The frequencies for each score 1 through 6 were examined. To better understand the degree of support for any of the criteria, the six point scale (1 disagree through 6 agree) was collapsed into two broad categories. Respondents who marked one, two, or three were determined to "disagree" with the statement. Respondents who marked four, five, or six

were determined to "agree" with the statement. Percentages of teachers who agreed or disagreed with a statement were then calculated. These percentages helped clarify which criteria teachers perceived to be most acceptable. A frequency table showing the total number of criteria each teacher found acceptable was created. The total number of criteria that each teacher agreed with was summed. The frequency table shows how many teachers found one criterion acceptable, two criteria acceptable, three criteria acceptable, etc. This table helps determine if teachers are receptive to the general idea of differentiating pay.

2. To what extent do teachers perceive favorable and unfavorable consequences to tying their pay to factors other than years of experience and level of college degree? The mean for each item was calculated, and each item was ranked by the mean score to show the degree to which teachers agreed with each statement. The means were subjectively compared for notable differences rather than using a statistical analysis such as a t-test or chi squared. The frequencies for each score one through six were examined. To better understand the degree to which the teachers agreed with each statement, the six point scale (1 disagree through 6 agree) was collapsed into two broad categories. Respondents who marked one, two, or three were determined to "disagree" with the statement. Respondents who marked four, five, or six were determined to "agree" with the statement. Percentages of teachers who agreed or

disagreed with a statement were then calculated. These percentages helped clarify which outcomes teachers perceived would most likely occur with differentiated pay.

3. Do years of experience affect the perceptions teachers have about criteria for enhancing their pay? Respondents were divided into two groups, 0-10 years of experience and 11 or more years of experience. The statistical mean for each of the 14 items about criteria to enhance pay was calculated for each group and subjectively compared for notable differences rather than using a statistical analysis such as a t-test or chi squared. The frequencies for each score one through six were examined. To better understand the degree of support for any of the criteria, the six point scale (1 disagree through 6 agree) was collapsed into two broad categories. Respondents who marked one, two, or three were determined to "disagree" with the statement. Respondents who marked four, five, or six were determined to "agree" with the statement. Percentages of teachers who agreed or disagreed with a statement were then calculated. These percentages helped clarify whether there was a difference between the perceptions of teachers with 1-10 years of experience and teachers with 11 or more years of experience.

A subjective comparison of the item means was used rather than a statistical analysis (t-test or chi squared) to avoid problems associated with significance testing on

items of unknown reliability. Bland (2000) cautions against "attaching too much significance" to a result when testing too many hypotheses at the same time. He explains that if we test 20 hypotheses at the same time on the same subjects, we increase the probability of getting a significant result by 20. Because the probability of getting a significant result is so much higher than when only one hypothesis is being tested on a group of subjects, the researcher must be careful. This study is based on item level analysis with each item being judged independently. A t-test or chi squared analysis on each of the 32 items would be inappropriate and as Bland suggests possibly misleading. Therefore, the means were subjectively compared for notable differences.

## Limitations of the Study

The results of this study are limited to the research sample. The population for this study included elementary, middle and high school certified teachers in a large, diverse, public school system. The school system was located in a suburban area of a large city. The teachers taught all subjects and were employed during the 2007-08 school year. The sample was chosen for convenience, and the cost of a larger or more diverse sample was not justified. The results cannot be generalized beyond the sample. No statistical inference is possible to other samples or populations. Any attempt to generalize beyond the sample should proceed with caution.

## Summary

Chapter Three has explained the method used in this study. It has described the development of the questionnaire, the process for collecting the data, the preparation of the data, the sample, and the limitations of the study. The following headings describe the topics included: theoretical framework, measurement framework, instrumentation,

prototype survey construction, concept clarification, creation of the item pool, refining the item pool, developing the preliminary field test study, administering the preliminary field test, review of the preliminary field test instrument and results, refinement of the survey instrument, validity of the survey, reliability of the survey, sample, data collection, data preparation, data analysis, and limitations of the study. Chapter Four will report the research findings and present the data. Chapter Five will discuss the findings, the importance of the study, implications of the findings or policy, implications of the findings for practice, and suggestions for further areas of research.

# CHAPTER 4

# FINDINGS

The purpose of this study was to examine and explain the factors that teachers find acceptable for enhancing their pay. The following research questions were used to guide the study:

1. To what extent do teachers find selected criteria acceptable for enhancing their pay?
2. To what extent do teachers perceive favorable and unfavorable consequences to tying their pay to factors other than years of experience and level of college degree?
3. Do years of experience affect the perceptions teachers have about criteria for enhancing their pay?

## Characteristics of the Sample

The study was limited to teachers and all surveys that were completed by administrators, paraprofessionals, and other non-certified personnel were purposefully removed from the data. Table 4.1 describes the personal characteristics of the respondents. The respondents had a mean age of 42.3 years and approximately 14 years of experience. They were predominantly white (90%) and female (73%). Most had a masters degree or higher (69%).

Table 4.1
*Personal Characteristics of Respondents*

| **Variable** | | **Values** | |
|---|---|---|---|
| Age | | M = 42.3 | SD = 12.1 |
| Years of experience | | M = 14.1 | SD = 11.1 |
| Gender | Male | N = 145 | 27% |
| | Female | N = 398 | 73% |
| Race | White | N = 473 | 90% |
| | Black | N =34 | 7% |
| | Asian | N = 3 | <1% |
| | Hispanic | N = 12 | 2% |
| | Multi/other | N = 5 | 1% |
| Degree | Bachelor | N = 160 | 30% |
| | Masters | N = 265 | 49% |
| | Specialist | N = 88 | 16% |
| | Doctorate | N = 20 | 4% |
| Level | Elementary | N = 110 | 20% |
| | Middle | N = 125 | 23% |
| | High | N = 305 | 56% |
| | Multiple levels | N = 6 | 1% |

## Findings Related to Research Question One

Research Question One explores criteria teachers find acceptable to enhance their pay. Table 4.2 presents the means for each criterion that show teachers find acceptable criteria to affect teacher pay. The criteria are ranked and listed by their mean score. When the means were the same for two criteria, the criteria were given the same rank. The scale ranged from 1 = disagree to 6 = agree. A theoretical midpoint of 3.5 was used to determine whether respondents agreed or disagreed with each criterion. A rating greater than 3.5 was scored as agree, and a rating less than 3.5 was scored as disagree.

Table 4.2

*Means Scores Showing Agreement with the Criteria to Affect Teacher Pay in Rank Order*

| Item<br>Teachers should be paid more if… | Mean | SD | Rank | Percent agree |
|---|---|---|---|---|
| They have more years of experience | 5.8 | .56 | 1 | 99% |
| They have earned advanced degrees | 5.8 | .58 | 1 | 99% |
| They participate in professional learning after contract hours | 5.4 | .99 | 2 | 95% |
| They have earned National Board Certification | 5.3 | 1.2 | 3 | 92% |
| They are favorably evaluated by an administrator | 3.9 | 1.8 | 4 | 63% |
| They teach in low performing schools | 3.7 | 1.6 | 5 | 59% |
| Their students show documented improvement on pretest/posttest data | 3.4 | 1.7 | 6 | 52% |
| They are favorably evaluated by a peer | 3.4 | 1.8 | 7 | 49% |
| Parents show satisfaction with their work | 2.9 | 1.8 | 8 | 37% |
| Their students have high scores on norm referenced tests | 2.7 | 1.6 | 9 | 34% |
| Their students have high scores on state criterion referenced tests | 2.6 | 1.6 | 10 | 30% |
| Their students have high scores on district level criterion referenced tests | 2.5 | 1.6 | 11 | 28% |
| Their students have high attendance rates | 2.1 | 1.3 | 13 | 17% |
| Fewer of their students are retained | 2.1 | 1.4 | 13 | 18% |

Note: The scale ranges from 1 = disagree to 6 = agree. The theoretical midpoint of 3.5 was used to determine agreement. Scores greater than 3.5 were determined to agree.

To better understand the findings, the mean scores for the criteria were collapsed into three subgroups. Mean scores of 5.0-5.9 were considered to show strong agreement. Mean scores of 3.0-3.9 were considered to show moderate agreement. Mean scores of 2.0-2.9 were considered to show disagreement. The mean scores were also compared to the theoretical midpoint of the scale. The scale ranges from one to six and would have a theoretical midpoint of 3.5.

The results of the questionnaire show that teachers strongly agree that pay should be higher for teachers with advanced degrees (M = 5.80). The mean is 2.3 points above the theoretical midpoint of the scale (3.5). Almost all of the teachers (99%) rated this criterion in the "agree" category.

The results of the questionnaire also show that teachers strongly agree that pay should be higher for teachers with more years of experience (M = 5.8). The mean is 2.3 points above the theoretical midpoint of the scale (3.5). This criterion also had a very high percentage of teachers (99%) rating it in the "agree" category.

Teachers also approve of higher pay for teachers who obtain National Board of Professional Teaching Standards Certification (M = 5.3). The mean is 1.8 points above the 3.5 theoretical midpoint of scale. The percentage of teachers rating this in the "agree" category was 92%.

There was also a high approval rating for teachers who participate in professional learning outside of contract hours (M = 5.4). The mean is 1.9 points above the theoretical mean of the scale. Ninety-five percent of the teachers rated this in the "agree" category.

Evaluation by an administrator (M = 3.9) was rated in the moderately agree subgroup. The mean score was four tenths of a point above the theoretical mean of 3.5. Almost two thirds of the teachers (63%) rated this in the "agree" category.

Teachers gave willingness to teach in low performing schools (M = 3.7) a moderate agreement rating. Their mean scores were a few tenths of a point above the theoretical midpoint (3.5) of the scale. Over half of them scored this criterion in the "agree" category.

Evaluation by a peer (M = 3.4) was scored in the moderately agree subgroup. The mean score was one tenth of a point below the theoretical midpoint of the six point scale. Forty nine percent of the teachers placed this criterion in the "agree" category.

Teachers scored documented improvement on pretest/posttest data (M = 3.4) with moderate approval also. The mean score was one tenth of a point below the theoretical midpoint of the scale (3.5). More than half the teachers (52%) placed this criterion in the "agree" category.

Teachers did not say that they should be paid more if parents showed satisfaction with their work (M = 2.9). The mean score was six tenths of a point below the theoretical midpoint of the six point scale (3.5). Only about one third of the teachers rated this criterion in the "agree" category.

Differentiating pay based on students who had high scores on norm-referenced tests (M = 2.7) was rated in the disagree subgroup. The mean score is eight tenths of a point below the theoretical midpoint of 3.5. About one third of the teachers (34%) rated this in the "agree" category.

Teachers did not agree that they should be paid more if their students had high scores on state criterion referenced tests (M = 2.6). The mean score was nine tenths of a point below the theoretical midpoint of 3.5. Only 30% of the teachers rated this is the "agree" category.

Neither did teachers agree that they should be paid more if their students had high scores on district criterion referenced tests (M = 2.5). This criterion had a mean score one full point below the theoretical mean (3.5). Only 28% of the teachers placed this in the "agree" category.

Paying teachers more if their students had high attendance rates (M = 2.1) was in the disagree subgroup. The mean scores is more than one point below the theoretical midpoint of the scale (3.5). Only 17% of the teachers scored student attendance in the "agree" category.

Teachers who had fewer students retained (M = 2.1) was also in the disagree subgroup. The mean score was more than a point below the theoretical midpoint of 3.5. Eighteen percent of the teachers placed this criterion in the "agree" category.

To determine whether teachers were receptive to differentiated pay in general, the number of criteria each teacher scored as favorable was placed in a frequency table. To better understand the degree of support for any of the criteria, the six-point scale (1 disagree through 6 agree) was collapsed into two broad categories. Respondents who marked one, two, or three were determined to "disagree" with the statement. Respondents who marked four, five, or six were determined to "agree" with the statement. The number of criteria each teacher scored in the "agree" category was summed and placed in Table 4.3.

Table 4.3

*Number of Criteria Marked "Agree" by Each Teacher*

| Number of criteria marked agree | Number of respondents | Percent | Cumulative Percent |
|---|---|---|---|
| 1 | 0 | 0 % | 0% |
| 2 | 2 | .4% | .4% |
| 3 | 10 | 2% | 2.% |
| 4 | 71 | 13% | 16% |
| 5 | 66 | 12% | 28% |
| 6 | 64 | 12% | 40% |
| 7 | 55 | 10% | 51% |
| 8 | 54 | 10% | 61% |
| 9 | 36 | 7% | 68% |
| 10 | 44 | 8% | 76% |
| 11 | 36 | 7% | 83% |
| 12 | 30 | 6% | 88% |
| 13 | 25 | 5% | 93% |
| 14 | 37 | 7% | 100% |
| Total | 530 | 99.4% | |

Every teacher approved of at least two criteria that could be used to differentiate teacher pay. Ten teachers agreed with three of the criteria. The number of teachers who agreed with four criteria is much larger than the number who agreed with one, two, or three criteria. The number of teachers who agree with four criteria is 71 which is seven times larger than those agreeing with three criteria. The number of teachers agreeing with five to eight criteria remains somewhat constant and ranges from 54 to 66 (10%-12%). The number of teachers agreeing with nine to fourteen of the criteria is also somewhat

constant ranging from 25 to 44 (5%-8%). To better understand the data, the table can be collapsed into three subgroups, teachers agreeing with 3 or less criteria, teachers agreeing with four to eight criteria, and teachers agreeing with nine or more criteria. Table 4.4 shows these subgroups and the number and percent of teachers in the group.

Table 4.4

*Number of teachers agreeing with multiple criteria to differentiate pay*

| **Subgroup** | **Number of teachers** | **Percent** |
|---|---|---|
| Teachers who agreed with three or fewer criteria | 12 | 2.4% |
| Teachers who agreed with four to eight criteria | 310 | 58% |
| Teachers who agree with nine or more criteria | 208 | 39% |
| Total | 530 | 99.4% |

More than half the teachers (58%) found four to eight criteria acceptable as a way to differentiate teacher pay. More than one third of the teachers (39%) found nine to fourteen criteria acceptable to differentiate their pay. Only 2.4% agreed that 3 or less of the criteria should be used to differentiate pay.

## Findings Related to Research Question Two

Research Question Two explores whether teachers perceive favorable and unfavorable consequences as outcomes of differentiated pay. Table 4.5 shows the degree to which teachers agree that differentiated pay will produce positive outcomes. The statements are ranked and listed by mean score. If the mean score for two statements was the same, the percent of agreement was used to determine which was ranked higher. The scale ranged from 1 = disagree to 6 = agree. A theoretical midpoint of 3.5 was used to

determine whether respondents agreed or disagreed with each criterion. A rating greater than 3.5 was scored as agree, and a rating less than 3.5 was scored as disagree.

Table 4.5

*Means and Ranks of Agreement with the Positive Outcomes of Differentiated Pay*

| Statement- Differentiated pay will: | Mean | SD | Rank | Percent agree |
|---|---|---|---|---|
| Reward good teaching | 3.5 | 1.7 | 1 | 56% |
| Attract more qualified candidates to the profession | 3.4 | 1.7 | 2 | 51% |
| Improve public perceptions of teaching as a profession | 3.2 | 1.7 | 3 | 52% |
| Improve teaching quality | 3.2 | 1.7 | 4 | 48% |
| Cause ineffective teaches to change their practices | 3.1 | 1.6 | 5 | 45% |
| Satisfy lawmakers' desire for accountability | 3.1 | 1.6 | 6 | 42% |
| Cause ineffective teachers to leave the profession | 3.0 | 1.6 | 7 | 39% |
| Increase student performance | 2.7 | 1.5 | 8 | 32% |

Note. The scale ranges from 1 = disagree to 6 = agree. The theoretical midpoint of 3.5 was used to determine agreement. Scores greater than 3.5 were determined to agree.

To better understand the findings, the mean scores for the criteria were collapsed into three subgroups. Mean scores of 5.0-5.9 were considered to show strong agreement. Mean scores of 3.0-3.9 were considered to show moderate agreement. Mean scores of 2.0-2.9 were considered to show disagreement. The mean scores were also compared to the theoretical midpoint of the scale. The scale ranges from one to six and would have a theoretical midpoint of 3.5.

Teachers moderately agree that differentiated pay will reward good teachers (M = 3.5). The mean score for the statement is the exact theoretical midpoint of the scale. A little more than half the teachers scored this criterion in the "agree" category.

Mean scores show that teachers moderately agree that differentiated pay will attract more qualified teachers (M = 3.4). The mean is one tenth of a point below the theoretical mean of 3.5. About half the teachers (51%) placed this criterion in the "agree category.

Teachers moderately agree that differentiated pay will improve public perceptions of teaching as a profession (M = 3.2). This mean is three tenths of a point below the theoretical midpoint of the scale (3.5). Again about half the teachers rated this criterion in the "agree" category.

Respondents moderately agreed that differentiated pay would improve teaching quality (M = 3.2). This mean is three tenths of a point below the theoretical midpoint of 3.5 for the scale. About half the teachers rated this criterion in the "agree" category.

Teachers rated the statement that differentiated pay would cause ineffective teachers to change their practice (M = 3.1) in the moderately agree subgroup. The mean is four tenths of a point below the theoretical midpoint of the scale (3.5). Forty-five percent of the teachers placed this criterion in the "agree" category.

Respondents rated the statement that differentiated pay would cause ineffective teachers to leave the profession (M = 3.1) in the moderately agree subgroup. The mean is four tenths of a point below the theoretical midpoint of the scale (3.5). About one third of the teachers rated this in the "agree" category.

Teachers moderately agreed that differentiated pay would satisfy lawmakers' desire for accountability (M = 3.1). The mean score is four tenths of a point below the theoretical midpoint of the six point scale (3.5) Forty two percent of the teachers rated this criterion in the "agree" category.

The highest level of disagreement came with the statement that differentiated pay would increase student achievement (M = 2.7). This mean is eight tenths below the theoretical midpoint of the scale (3.5). Only one third (32%) felt differentiated pay would improve student performance.

Table 4.6 shows the degree to which teachers agree that differentiated pay will produce negative outcomes. The statements are ranked and listed by mean score. If the mean score for two statements was the same, the statements were given the same rank.

To better understand the findings, the mean scores for the criteria were collapsed into four subgroups. Mean scores of 5.0-5.9 were considered to show strong agreement. Mean scores of 4.0-4.9 were considered agree. Mean scores of 3.0-3.9 were considered to show moderate agreement. Mean scores of 2.0-2.9 were considered to show disagreement. The mean scores were also compared to the theoretical midpoint of the scale. The scale ranges from one to six and would have a theoretical midpoint of 3.5.

If means are compared to the theoretical midpoint of 3.5, nine out of ten of these statements show that teachers agreed to a greater degree that differentiated pay would have negative effects. All of these negative outcomes show agreement by half or more of the teachers in the study.

Table 4.6

*Means and Ranks of Agreement with the Negative Outcomes of Differentiated Pay*

| Statement-Differentiated pay will: | Mean | SD | Rank | Percent agree |
|---|---|---|---|---|
| Cause teachers to want to have only bright, hard-working students in their class | 5.0 | 1.4 | 1 | 85% |
| Cause teachers to avoid having socially disadvantaged students in their class | 4.8 | 1.5 | 2 | 80% |
| Cause teachers to avoid having students whose first language is not English in their class | 4.8 | 1.6 | 2 | 80% |
| Cause teachers to avoid having special education students in their class | 4.8 | 1.6 | 2 | 80% |
| Will lead to resentment among lower paid teachers | 4.7 | 1.4 | 5 | 79% |
| Harm teacher morale | 4.3 | 1.6 | 6 | 68% |
| Cause undesirable competition among teachers | 4.3 | 1.6 | 6 | 70% |
| Interfere with collaboration among teachers | 4.2 | 1.6 | 8 | 66% |
| Take the creativity out of teaching | 3.6 | 1.8 | 9 | 50% |
| Cost tax payers too much money | 3.0 | 1.5 | 10 | 63% |

Note. The scale ranges from 1 = disagree to 6 = agree. The theoretical midpoint of 3.5 was used to determine agreement. Scores greater than 3.5 were determined to agree.

Teachers strongly agreed that differentiated pay would cause them to want only bright, hard working students in their class (M = 5.0). This mean is 1.5 points above the theoretical midpoint of the six point scale (3.5). A large percentage of teachers (85%) rated this in the "agree" category.

They also agree that differentiated pay would cause teachers to avoid teaching disadvantaged students (M = 4.8). The mean scores is 1.4 points above the theoretical midpoint of the scale (3.5). Eighty percent rated this statement in the "agree" category.

Teachers also said differentiated pay would cause teachers to avoid having English language learners in their class (M = 4.8). The mean score is 1.3 points above the 3.5 theoretical midpoint of the scale. Once again eighty percent of the teachers rated this in the "agree" category.

Respondents thought differentiated pay would cause teachers to avoid having special education students in their class (M = 4.8). This mean is 1.3 points above the theoretical midpoint of 3.5. Eighty percent placed this statement in the "agree" category.

Teachers agreed that differentiated pay would cause resentment among lower paid teachers (M = 4.7). The mean is 1.2 points above the theoretical midpoint of the six point scale (3.5). Seventy nine percent of the teachers placed this in the "agree" category.

Respondents said that differentiated pay would harm morale among teachers (M = 4.3). The mean is eight tenths of a point above the theoretical midpoint of the scale (3.5). Sixty eight percent of teachers rated this in the "agree" category.

The respondents believed that differentiated pay would cause undesirable competition among teachers (M = 4.3). The mean is eight tenths above the theoretical midpoint of the scale. Seventy percent of the teachers rated this statement in the "agree" category.

Teachers agreed that differentiated pay would interfere with collaboration among teachers (M = 4.2). The mean is seven tenths of a point above the theoretical midpoint of the six point scale (3.5). Sixty-six percent of the teachers rated this in the "agree" category.

Teachers moderately agreed that differentiated pay would take the creativity out of teaching (M = 3.6). The mean is one tenth of a point above the theoretical midpoint of the scale (3.5). Half of the teachers (50%) rated this statement in the "agree" category.

Teachers moderately agree that differentiated pay as costing taxpayers too much money (M = 3.0). The mean is half a point below the theoretical midpoint of the six point scale (3.5). About two thirds (63%) of the teachers rated this statement in the "agree" category.

Item 33 was an open-ended question asking for additional comments about differentiated pay. About one third (34%) of the respondents answered this question (n=189). The comments are listed by respondent number in Appendix O. Each comment was examined and rated as either positive, negative, mixed response, or neutral. The mixed response category consisted of comments that had both a positive and negative component. Table 4.7 shows the number of teachers who wrote positive, negative, mixed, or neutral responses to the open ended question.

Table 4.7

*Frequencies and Percentages of Positive, Negative, Mixed and Neutral Responses to Open Ended Item 33*

| Response | Frequency | Percentage |
|---|---|---|
| Positive | 61 | 32% |
| Negative | 70 | 37% |
| Mixed | 25 | 13% |
| Neutral | 33 | 17% |
| Total | 189 | 99% |

The analysis of open-ended responses to item 33 revealed that 61 teachers wrote positive comments about differentiated pay, 70 teachers wrote negative responses, 25 wrote mixed responses and 33 wrote neutral responses. The percentage of negative responses written by teachers (37%) was higher than the positive responses (32%), mixed (13%) and neutral (17%) responses.

Table 4.8
*Categories and explanations for open ended response item 33*

| **Category** | **Explanation of the category** |
|---|---|
| 1. Certified support problems | These comments had questions about how music, art, physical education and computer teachers would be included since they are not classroom teachers. |
| 2. Implementation | These comments mentioned the difficulty with implementing a system of differentiated pay without being specific about the difficulties. |
| 3. Negative responses | These comments added emphasis or reiterated negative attitudes about differentiated pay. |
| 4. Do not use test data | These comments explicitly said do not use test data. The comments did not explain why. |
| 5. Evaluation bias | These comments explicitly mentioned evaluation bias as being a concern or the comments explicitly stated that differentiated pay relied on too many subjective criteria. |
| 6. Suggestions for differentiating pay | These comments offered suggestions repeating some of the items listed in the survey or offering new perspectives or ideas. |
| 7. Positive responses | These comments added emphasis or reiterated positive attitudes about differentiated pay. |
| 8. Reflective responses | These comments give evidence that these teachers were processing and reflecting on differentiated pay. |
| 9. Student characteristics | These comments explicitly mentioned student characteristics like special ed, ELL, poverty, and lack of motivation. |
| 10. Teaching to the Test | These comments explicitly said that differentiated pay would lead to teaching to the test. |

The responses were also placed into groups based on the content of the response. If six or more responses mentioned a topic, that topic was included as a category. Table 4.8 shows categories that contained six or more respondent comments and an explanation of the category.

Responses to the open-ended item 33 were categorized into the ten categories described in Table 4.8, and Table 4.9 shows the ranks, frequency and percentage of these responses.

Table 4.9

*Ranks, Frequencies and Percentages of Responses in Each Category for Item 33*

| Rank | Category | Frequency | Percentage |
|---|---|---|---|
| 1 | Suggestions for differentiating pay | 47 | 25% |
| 2 | Student Characteristics | 36 | 19% |
| 3 | Negative Responses | 22 | 12% |
| 4 | Do not use test data | 19 | 10% |
| 5 | Evaluator bias and subjectivity of criteria | 16 | 8% |
| 6 | Implementation | 14 | 7% |
| 7 | Reflective | 14 | 7% |
| 8 | Teaching to the test | 9 | 5% |
| 9 | Positive responses | 7 | 4% |
| 10 | Certified support problems | 7 | 4% |

The largest number of responses (47) fell into Suggestions for Differentiated Pay. One respondent suggested," Differentiated pay would be acceptable as long as the criteria are established and clearly disseminated to teachers. I would favor an independent agency conducting evaluations/reviews rather than peers or administrative staff." Another response was "Critical need areas like Science, Math, and special Ed. should be paid more." Several responses mentioned pay for extra work. One example is, "There are many teachers who do so much and go unrecognized. This would satisfy this. I teach sped and put in min. 60-70 hrs. a week individualizing the students work. This should be recognized. The paperwork per student is ridiculous."

Student Characteristics were also mentioned often in the comments. Many of these comments mentioned that teachers have "no control over" the types of students placed in their classroom and noted that teaching students of poverty, English language learners, and special education students with disabilities would be a more difficult task than teaching students from higher socio-economic levels, students who were English proficient, and students without disabilities. Some sample responses are, "The distribution of students in our classrooms is not equitable" and "Differentiated pay does not take into account circumstances not under the teacher's influence such as attendance of students or the student's learning style or ability." One respondent wrote, "I think it is extremely unfair to even consider paying teachers more who work in high achieving schools vs. those teachers who work in low achieving schools. Teachers in those schools work far harder than teachers in high achieving schools."

There were 22 responses in the Negative Response category that emphasized or reiterated a negative attitude to differentiated pay. Comments included statements like,

"there would be an exodus of science and math teachers since these are areas of low performance on standardized tests." Other comments were, "NO WAY!" and "I think you're asking for trouble."

Nineteen responses included comments that said Do Not Use Test Data. One respondent wrote, "If we move to differentiated pay based on test scores, I will leave the profession. I believe this is completely unwarranted and unfair and my students have not scored low." Another respondent wrote, "Assessment is not "clear-cut" in 1 test only. The assessment of an educational system can better be measured after students get into the real world. The intangibles do not show up on a test. As a veteran teacher who takes pride in my work I RESENT being evaluated on test performance only. Have the legislators take time out and observe great teaching practices not BUBBLED IN TESTS ONLY!"

Evaluator Bias and Subjectivity of Criteria were mentioned 16 times. Sometimes respondents suggested an outside agency to evaluate. One respondent wrote, "My concern is that personality conflicts lower the pay of a good teacher or conversely increase the pay of a less effective teacher." "Differentiated pay is a double edge sword that if left to favorable administrative evaluation, could become biased by personality conflicts and/or affinity, and create resentment."

Implementation was a concern mentioned by 14 respondents. One respondent wrote, "It's a great idea but making it work for the benefit of teachers and students will take an act of god." Another respondent said, "If this type of organization or program could be operated in a completely fair way, it might promote student growth. The potential for disaster may outweigh the potential for growth."

Fourteen responses were reflective in nature, revealing the thought processes of the respondents. Examples include "It really doesn't matter what I think as there is no real force representing teacher pay issues at any level of gov't." and "Effective and efficient would always want to give their students their best. Their main reward is usually the satisfaction they get from seeing their students do well or improve."

Nine comments fell into the Teaching to the Test category. Respondents mentioned teaching to the test in negative terms. Their comments mentioned teachers who might be tempted to cheat. An example is "From my observation, even educators may be dishonest and cheat to make their students "appear" better performers. Merit pay would increase cheating on the teacher's part to an extremely high level." One comment was, "Differentiated pay will do irreparable damage to the teaching profession. There are too many factors of which teachers have no control. I believe this policy would lead to "teaching to the test" and further reduce teaching "the whole child." Everyone would welcome higher pay, but not at the expense of our students and our profession!"

Seven respondents emphasized or reiterated positive attitudes with their comments. One respondent said, "It could be a good thing." Another said, "Great idea! Non-motivated teachers should consider another profession that will not affect future adults negatively."

Seven responses fell into the Certified Support Problems category. They raised the issue of how music, art, physical education, and technology teachers would be included in a differentiated pay program. One technology teacher said, "What standardized test will indicate that business ed/computer science teachers are succeeding? Why should math & science teachers be paid more? The curriculum does not change,

whereas, my area is constantly changing-new software, new technology, new courses. Differentiated pay is totally unfair across the board-those teachers who can, will teach only to the test to receive higher pay. I will be thrown under the bus."

## Findings Related to Research Question Three

Research question three explores whether years of experience affect teachers perceptions about differentiated pay. The years of experience for teachers in the study ranged from 0 to 40. The data indicated that about half of the teachers had ten or less years of experience and about half had 11 or more years of experience. Respondents were divided into two groups, 0-10 years of experience and 11 or more years of experience. Five hundred forty-five teachers listed their years of experience. There were 271 teachers who had 0-10 years of experience and 274 who had 11 or more years of experience. The statistical mean for each of the 14 items about criteria to enhance pay was calculated for each group and compared (Table 4.10). . The scale ranged from 1 = disagree to 6 = agree. A theoretical midpoint of 3.5 was used to determine whether respondents agreed or disagreed with each criterion. A rating greater than 3.5 was scored as agree, and a rating less than 3.5 was scored as disagree.

Table 4.10

*Comparison of the Means and Percentages of Agreement for Less Experienced and More Experienced Teachers*

| Criteria<br>Teachers should be paid more if… | Mean<br>0-10 years N = 271 | Mean<br>11 or more years N = 274 | % agree<br>0-10 years | % agree<br>11 or more years |
|---|---|---|---|---|
| They have more years of experience | 5.7 | 5.9 | 98% | 100% |
| They have earned advanced degrees | 5.8 | 5.8 | 99% | 99% |
| They participate in professional learning after contract hours | 5.5 | 5.4 | 97% | 93% |
| They have earned National Board Certification | 5.5 | 5.2 | 96% | 88% |
| They are favorably Evaluated by an administrator | 4.0 | 3.9 | 65% | 64% |
| They Teach in low performing schools | 3.8 | 3.7 | 59% | 60% |
| Their students show documented improvement on pretest/posttest data | 3.5 | 3.4 | 52% | 52% |
| They are favorably evaluated by a peer | 3.4 | 3.4 | 47% | 50% |
| Parents show satisfaction with their work | 3.1 | 2.7 | 39% | 36% |
| Their students have high scores on norm referenced tests | 2.7 | 2.6 | 33% | 33% |
| Their students have high scores on state criterion referenced tests | 2.7 | 2.5 | 31% | 27% |
| Their students have high scores on district criterion referenced tests | 2.7 | 2.5 | 30% | 25% |
| Their students have high attendance rates | 2.0 | 2.1 | 16% | 18% |
| Fewer of their students are retained | 2.0 | 2.1 | 17% | 19% |

Note. The scale ranges from 1 = disagree to 6 = agree. The theoretical midpoint of 3.5 was used to determine agreement. Scores greater than 3.5 were determined to agree.

The means were similar for both groups in most cases differing by two tenths of a point or less. Teachers in both groups approved of paying teachers for their years of experience. Teachers with 0-10 years of experience had a mean score of 5.7 and those with 11 or more years of experience had a mean score of 5.9. Both groups also agreed that advanced degrees were acceptable. The mean score for both groups was 5.8. Less experienced teachers agreed that professional learning after contract hours was an acceptable way to enhance pay (M = 5.5). More experienced teachers agreed (M = 5.4).

The means for the two groups were similar for evaluation by an administrator with the less experienced teacher mean of 4.0 and the more experienced teacher mean of 3.9. Teachers with 10 or less years experience agree with paying teachers more for teaching in low performing schools with a mean of 3.8. The more experienced teachers also agreed with a calculated mean of 3.7. Both groups were similar in their opinion about improvement on pretest/posttest data as a criterion to enhance teacher pay. The 0-10 years of experience group had a mean score of 3.5 and the more experienced teachers had a mean score of 3.4. The groups had exactly the same mean score (3.4) for evaluation by a peer. Parent satisfaction as a criteria for enhancing teacher pay was somewhat more accepted by teachers with 0-10 years of experience (M = 3.1) than by teachers with 11 or more years of experience (M = 2.7).

Both groups agreed that standardized tests were not acceptable ways to determine teacher pay. The means were similar for both groups on all three items related to standardized tests. For norm referenced tests the mean was 2.7 for the 0-10 years of experience group and 2.6 for 11 or more years of experience group. State tests as a criterion for enhancing pay showed mean scores of 2.7 for the less-experienced teachers

and 2.5 for the more-experienced teachers. Local standardized test means were 2.7 for less- experienced teachers and 2.5 for more experienced teachers.

Attendance and student retention were not acceptable to either the less experienced or more experienced group. The 0 -10 years experience group had a mean score of 2.0 on both criteria. The 11 and more years of experience group had a mean score of 2.1 on both criteria. A Pearson Correlation confirmed no correlation between the years of experience of teachers and their willingness to accept certain criteria to enhance their pay ($r = .168$).

To better understand the degree of support for any of the criteria, the six point scale (1 = disagree through 6 = agree) was collapsed into two broad categories. Respondents who marked one, two, or three were determined to disagree with the statement. Respondents who marked four, five, or six were determined to agree with the statement. Percentages of teachers who agreed or disagreed with a statement were then calculated and appear in Table 4.10. These percentages helped clarify whether there was a difference between the perceptions of teachers with 1-10 years of experience and teachers with 11 or more years of experience. The percentages were consistent with the previous findings and showed no difference between the percentages of agreement for the two groups.

Chapter Four has included the research findings and presented the data for the criteria acceptable for enhancing teacher pay, the perceived positive consequences, the perceived negative consequences, the results of open-ended question 33, and the correlation of years of experience to acceptability of certain criteria. Chapter Five will

discuss the findings, the importance of the study, implications of the findings for policy, implications of the findings for practice, and suggestions for further areas of research.

# CHAPTER 5

# DISCUSSION OF FINDINGS

The purpose of this study was to examine and explain the factors that teachers find acceptable for enhancing their pay. The following research questions were used to guide the study:

1. To what extent do teachers find selected criteria acceptable for enhancing their pay?
2. To what extent do teachers perceive favorable and unfavorable consequences to tying their pay to factors other than years of experience and level of college degree?
3. Do years of experience affect the perceptions teachers have about criteria for enhancing their pay?

## Importance of the Study

Since 1983 when the U. S. Department of Education published *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) experts have been reminding us that a strong and effective education system is important to both the economic and national security well-being of our country. Experts and national commissions are urgently calling for changes that keep America's educational system even stronger as we begin to compete in a world wide market (Friedman, 2005; National Center on Education and the Economy, 2007; The Teaching Commission, 2004). In *The World Is Flat: A Brief History of the Twenty-First Century,*

Friedman (2005) cautions that the United States is not producing enough engineers and scientists and states:

> We are developing an education gap. Here is the dirty little secret that no C.E.O. wants to tell you: they are not outsourcing to save on salary. They are doing it because they can often get better-skilled and more productive people than their American workers. (p. 270)

To insure a strong educational system that can compete in the world market, effective teachers are needed. To achieve the goal of closing the achievement gap between African American and Hispanic students and their white peers, it is necessary to recruit and retain the brightest students to enter the teaching field. The National Center of Teaching and the Economy (2007) and The Teaching Commission (2004) recommend using teacher pay to help advance the goal of a stronger more competitive system to educate children.

Over the past 25 years, the call for differentiating pay to reward good teachers has repeatedly been advocated and tried. Even though the attempts have not been successful, and these pay structures have not been sustained, the principle of differentiated pay has not been abandoned by policymakers. More and more research is being completed and shared about differentiating teacher pay (Chance, Malo, & Pickettt, 1988; Edelfelt, 1985; Fuhrman & O'day, 1996; Hartshorn, Prather & Chance, 1988; Hawley, 1985; Henson & Hall, 1993; Kelley, Odden, Milanowski, & Heneman, 2000; Middleton, 1989; Odden, 1992, 2000b, 2001; Odden & Kelly, 1997; Odden & Picus, 2000, Stronge, Gareis, & Little, 2006; The Teaching Commission, 2004). It is clear that policymakers are convinced that teacher pay should be used to advance school improvement and are

serious about attempts to change teacher pay structures. The results of this study help policymakers to understand teachers and how the motivation theories that affect teacher performance might play into the practices used to differentiate teacher pay.

Changing teacher pay structures from the traditional single salary schedule based on years of experience and college degree will create strong reactions from teachers. The history of teacher pay shows multiple attempts at changing teacher pay structures that have met with failure. The data show that half of all beginning teachers leave within the first five years (The National Commission on Teaching and America's Future, 2003). This attrition rate impacts the quality of teachers. The recommendation of experts is to use teacher pay to recruit and retain effective teachers. If pay changes are implemented and teachers do not agree with the changes, the result might be to lose even more teachers from the profession. The results of this study can offer insight into the beliefs that teachers have about their pay and assist policymakers in avoiding problems encountered in the past.

Odden and Kelley (2002) state the "involvement of all key parties, especially those whose compensation is being changed is the preeminent principle for successfully changing compensation structures" (p. 206). This study helps inform policymakers about the attitudes that teachers have about changing their pay. It reveals the degree to which certain criteria are acceptable to them for changing their pay. It also reveals the favorable or positive outcomes they believe will occur as well as the unfavorable or negative outcomes they believe will occur. It is one method for involving teachers in the process of changing teacher pay structures.

## Conclusions about Research Question One

Teachers overwhelmingly agree with paying teachers more for advanced degrees and years of experience. These two criteria are the ones currently used in the single salary schedule common to most school systems. This finding indicates that teachers are accepting of the current pay structure. The single salary schedule has the benefit of being predictable and stable which allows teachers to plan for the future (Stronge, Gareis, & Little, 2006; Ruml & Tickton, 1955). Teachers also strongly agree with paying teachers more for National Board of Professional Teaching Standards Certification and professional learning outside of contract hours. These two criteria are similar to advanced degrees in that they provide increased knowledge and skills training. Paying teachers more for these criteria does not represent a marked change from the status quo. Only these four criteria that are so similar to the current pay structure met with a high degree of approval.

Two more criteria met with a moderate degree of approval. These were evaluation by an administrator and willingness to teach in low performing schools. Once again teachers were accepting of the familiar and traditional ways of doing business. Even though most teachers are not paid based on the evaluation of an administrator, they are experienced in having an evaluation from an administrator. They were only somewhat acceptable of using that evaluation as criteria for their pay. The midpoint of the scale used was 3.5 and the mean score for evaluation by an administrator was 3.9. Almost two thirds (63%) of teachers rated evaluation by an administrator as an acceptable criterion for determining their pay. As policymakers implement plans for paying effective teachers more money, they will need to carefully consider the means for

evaluating whether a teacher is effective. This research indicates that teachers are somewhat concerned about evaluator bias. In the open ended responses, eight percent of the responses mentioned evaluator bias.

Teaching in low performing schools also met with moderate agreement. The mean score was 3.7 and over half (59%) of teachers rated it as acceptable. Responses to the open-ended question 33 mentioned student characteristics 36 times. Teachers agreed that some students were more difficult to teach and were acceptable to paying teachers more when they worked with these types of students. As one respondent wrote, "Teachers in those schools work far harder than teachers in high achieving schools." Students who are more difficult to teach usually have lower standardized test scores. If teacher pay were to be differentiated so that teachers were paid less at these schools with low test scores, teachers would disagree with the pay structure. If differentiated pay was structured to pay more to teachers who were willing to teach in low performing schools, teachers would agree with that pay structure.

If we consider the midpoint of the six point scale (3.5) as an indicator of agreement, more criteria met with disapproval than with approval. Eight of the fourteen criteria received scores below the midpoint of the six-point scale (3.5) that showed teachers did not agree with using them to determine teacher pay. Two criteria showed only a weak disagreement. Improvement on pretest/posttest data had a mean score of 3.4 and 52% of teachers scored it 3 or higher on the 6 point scale. In the open ended responses, teachers mentioned criteria over which they had no control. Improvement on pretest/posttest data is a criteria that they can somewhat control with their students. Teachers were clearly not agreeable to using standardized test scores as a criteria but

perhaps perceived the pretest/posttest data to be more classroom based and therefore easier for them to see their teaching as having an effect on the data.

Evaluation by a peer was another criterion that showed only moderate disagreement as a criterion to determine pay. The mean score was 3.4 and forty-nine than having a peer evaluate them (M = 3.4). Sixty-three percent ranked administrator evaluation as acceptable while only forty-nine percent ranked evaluation by a peer as acceptable. Evaluation by a peer is not as traditional or common and is more of a change from the status quo.

Six of the criteria were not found acceptable by teachers as a way to determine their pay. Their mean scores were below 3.0 on the six-point scale and about one third or less of the teachers rated them in the "agree" category. They included parent satisfaction, norm referenced tests, state standardized tests, district standardized tests, student attendance, and number of students retained. Open ended responses to question 33 revealed some strong emotional reactions from teachers about having their pay tied to student achievement test scores. Twenty-two were negative comments in general and nineteen specifically mentioned test data. The following comments help describe the strong emotional responses:

1. "There would be and exodus of science and math teachers since these are areas of low performance on standardized tests."
2. "NO WAY!"
3. "I think you're asking for trouble."
4. "If we move to differentiated pay based on test scores, I will leave the profession. I believe this is completely unwarranted and unfair and my students have not scored low."

While teachers agree that teaching in a low performing school is hard work and is an acceptable criterion for differentiating pay, they are quite concerned about receiving less

pay for working with low performing students. Nineteen percent of the responses to the open ended question mentioned student characteristics as having an affect on whether a teacher is perceived as effective. They appear to believe that good teachers using best practices don't always achieve the highest test scores. Students who are socially disadvantaged, English language learners, or special education students may not score as well as their peers on standardized tests even though their teachers are quite skilled. Teachers mentioned many negative effects that might occur if pay is differentiated. They believed that teachers would want to avoid these difficult to teach groups of children and that collaboration among teachers would suffer as a result. They believed that differentiating pay based on test scores would cause resentment, undesirable competition, and low morale.

Along with tests scores, teachers did not think parent satisfaction, student attendance, and retaining lower numbers of students were acceptable measures to determine pay. These measures did not, however, specifically elicit frequent or emotional comments on the open-ended question.

In summary, teachers found the four criteria related to education and experience to be highly acceptable to determining pay. They found two criteria with which they had experience and felt were fair that were somewhat acceptable for determining pay. These two were evaluation by an administrator and teaching in low performing schools. They found 2 criteria that they found somewhat unacceptable as a way of determining their pay. These two were when their students showed documented improvement on pretest/posttest data and evaluation by a peer. They found 6 criteria including district,

state and national test score data, student attendance and retention and parent satisfaction that were highly unacceptable as a way of determining their pay.

To better understand the degree to which teachers find certain criteria acceptable for enhancing their pay, an examination of how many of the criteria each teacher found acceptable is helpful. The single salary schedule is based on two of the criteria, years of experience and college degree. It has been noted that these two criteria met with high approval from teachers. A close analysis of the data concerning the number of criteria teachers found acceptable shows that 98% of the teachers agreed with four or more criteria. This might indicate that teachers are willing to consider a pay structure that deviates from the single salary schedule and accept some other types of criteria to determine their pay. Fifty-eight percent of the teachers agreed with four to eight of the criteria and thirty-nine percent agreed with nine or more.

A closer look at the criteria that received scores in the "agree" category shows that they included criteria that can be described as knowledge and skills based criteria. They included the criteria that dealt with professional development and positive evaluations more than the types of criteria that could be described as student achievement data. Teachers rated the criteria in a way that shows they believe that teachers who work with students who historically score lower on standardized test data should be paid more. Their comments of the open-ended question and scores on criteria about test scores seem to show that they are fearful that the opposite might occur. They are fearful that teachers who work with the students who are traditionally more difficult to teach like socially disadvantaged students, special education students, and limited English proficient students will be paid less because the test scores are lower.

## Conclusions about Research Question Two

### Favorable Outcomes

Even though national commissions and experts in the field are calling for teacher pay structures that will advance education goals like recruiting and retaining highly qualified teachers, improving the quality of veteran teachers and improving student achievement, the results of this questionnaire show that teachers do not agree that differentiated pay will produce these results. Mean scores show that teachers are evenly split on their agreement that differentiated pay will reward good teaching (M = 3.5) and attract more qualified candidates (M = 3.4). They believe that differentiated pay will have some affect on how the public perceives teachers (M =3.2) and possibly will improve teaching quality (M = 3.2). They disagree that differentiated pay will cause ineffective teachers to change their practice (M = 3.1) or leave the profession (3.0). The largest level of disagreement is with the idea that differentiated pay will increase pupil performance. Only one third of the teachers (33%) believe that differentiated pay will have the outcome of improving student achievement.

Teachers did not perceive differentiated pay to have positive outcomes. Of the eight positive outcomes that could occur as a result of differentiated pay, mean teacher scores did not rank any of them above the midpoint on the six-point scale (3.5). The most sought after outcome for differentiated pay would be improved student achievement, and this outcome is perceived as the least likely outcome by teachers completing this questionnaire.

Unfavorable Outcomes

In contrast to the positive outcomes, the majority of respondents agreed with all the statements of negative outcomes, and they agreed in greater percentages. Nine of the ten statements had a mean score above the theoretical mean of 3.5, and all ten statements had 50% or more of the teachers rate it in the "agree" category. The statement that differentiated pay would cause taxpayers too much money had a mean of 3.0 but 63% of the teachers rated it in the "agree" category. Respondents agreed that differentiated pay would cause teachers to seek out bright, easy-to-teach students (M = 5.0) and avoid harder to teach students like special education students (M = 4.8), economically disadvantaged students (M =4.8), and English language learners (M =4.8). A large majority of teachers felt that differentiated pay would harm teacher morale (M = 4.3) and cause resentment (M = 4.7) and undesirable competition among teachers (M = 4.7). They perceived differentiated pay as interfering with teacher collaboration (M =4.2). They also believed that it would take the creativity out of teaching (M = 3.6) and cost tax payers too much money (3.0).

Teachers who completed this questionnaire agreed that all possible negative outcomes mentioned would be likely to occur. They did not perceive differentiated pay as achieving the intended positive outcomes that experts and national commissions would suggest. The open-ended response question 33 confirmed this negative perception with 37 % of the responses being categorized as negative. Teachers were not encouraged that the implementation would be fair or easy to establish. One respondent wrote, "If this type of organization or program could be operated in a completely fair way, it might

promote student growth. The potential for disaster may outweigh the potential for growth."

## Conclusions about Research Question Three

The number of years of experience a teacher has does not seem to affect their attitudes about criteria for differentiated pay. Teachers were divided into two groups, 0-10 years of experience and 10 or more years experience. The two groups had similar mean scores and percentages of agreement with every one of the 14 criteria for differentiating teacher pay. Conventional thought might lead one to expect that teachers with more years of experience would be more reluctant to change the status quo than teachers just entering the field. Teachers with less years experience might be more open to change or might have been educated in undergraduate programs that promote a different thought process about teacher pay. The findings did not support this line of thinking. There was not a statistical difference between the two groups on any of the criteria.

## Implications for Policy

As policymakers proceed with their attempt to have teacher pay advance organizational goals, they would be wise to consider the perceptions and attitudes of the teachers revealed by this study. The teachers are affected by the changing pay structures and can be proponents for the changes or lead in a fight against the changes.

Policymakers can make better decisions by remembering the motivation theories of Maslow (1954) and McClelland (1987) that describe the needs for achievement, affiliation, belonging, and self-actualization. While teacher pay might be a symbol for the fulfillment of these needs, it is an extrinsic reward while the needs for achievement,

affiliation, belonging, and self-actualization are intrinsic. Rewards and recognition other than teacher pay must not be neglected as teacher pay receives more attention. Herzberg's (1968) hygiene factors would also support the idea that rewards and recognition and satisfaction with the work itself cannot be ignored as teacher pay gains more attention. The results of the study show that teachers did not strongly agree that differentiated pay would cause positive outcomes. They did more strongly agree that there would be negative outcomes. These results support Herzberg's theory that job satisfaction and job dissatisfaction should be considered separately. Policymakers should take care that as they attempt to use teacher pay to attract more qualified teachers to the profession that they do not at the same time create factors that cause job dissatisfaction for those already in the profession.

McClelland's (1987) idea that power can be motivating reiterates the recommendation that teachers have broad involvement in the process for changing teacher pay. Lawler's (1990) participative management theory also supports the idea that teachers should help in setting goals and making changes. The results of this study show that one third of the teachers took time to answer the open-ended question even after answering 32 other items. The largest category of responses was "suggestions for differentiated pay". These results seem to confirm the principle of participative management theory that says teachers want to be involved in the decisions that affect them.

Bandura's self efficacy research shows that teachers are motivated by the success and confidence gained with professional development (Bandura, 1997). This adds increased importance to the high acceptance rates teachers showed for criteria that

address higher college degrees, professional development after contract time, and National Board of Professional Teaching Standards Certification. Differentiating teacher pay in a way that rewards teachers for learning new skills would motivate teachers on two levels by increasing their self efficacy and providing the extrinsic reward of extra pay. It is logical to expect that these new skills would then result in more effective teaching and greater student achievement. Providing teachers with new skills would align with the organizational goal of teaching students to high standards. It should be noted that learning new skills does not always mean that they are practiced effectively in the classroom and result in student achievement.

Research shows that high anxiety helps with easy tasks but inhibits more difficult tasks (Heckhausen, 199l). Teaching all students to high standards is a more difficult task and would be more easily achieved in an environment with less anxiety. Results of the study show more agreement with negative outcomes of differentiated pay and some emotional and negative responses to the open-ended question. Policymakers need to take care that teachers do not feel high anxiety at the prospects of teacher pay changes.

Expectancy theory states that teachers would be motivated if they valued the reward offered, believed they could achieve it, and believed that the expected reward would really be given (Vroom, 1964). Comments made for the open-ended question on this questionnaire show that there is some doubt in teacher's minds that a differentiated pay structure can be implemented. The comments imply that teachers do not feel that they can fairly earn the reward or that a system can be designed that would in fact result in a reward. The teacher comments fell into ten basic categories. Five of those categories reflect doubt about the implementation of differentiated teacher pay. One category

specifically dealt with statements that mentioned the difficulty of implementation. One category called student characteristics contained statements about the fairness of judging student achievement when the characteristics of the students in classes might be quite different. One category was for statements that discussed evaluator bias. Another category was for statements that asked about teachers who worked in support roles like art, music, or teachers who taught only small groups of students who were remedial. These teachers do not have a list of students who are considered their academic responsibility and wondered how they would be included in any differentiated pay system. The last category included negative comments. These responses might imply that teachers do not believe that they will actually receive a teacher pay increase or that they might have difficulty earning it.

Policymakers can benefit from the results of this study. The same teachers who will be the ones affected by the policies they suggest do not agree at the moment that desirable outcomes will be a result. Their responses reflect some doubts about differentiated pay. Teachers do show a tendency to accept some factors other than years of experience and college degree as criteria to differentiate their pay. Policymakers and teachers will need to find more common ground before any policy changes can be effectively implemented.

## Implications for Practice

The research findings support the common practice of paying teachers for their years of experience and college degree. They also support paying teachers more for having National Board of Professional Teaching Standards certification and professional

learning outside contract hours. For the moment teacher pay structures should continue to use these more traditional and familiar criteria to determine teacher pay.

The findings indicate that teachers are more accepting of an evaluation by an administrator as a next step toward differentiated teacher pay. Even though past attempts at using these types of evaluation have met with resistance and failure, this criterion was the next most acceptable item for differentiating pay and progress has been made in correcting the often mentioned problem of evaluator bias (Frymier, 1998; Milanowski, Odden, & Youngs, 1998; Urganski & Erskine, 2000). Charlotte Danielson's book, *Enhancing Professional Practice: A Framework for Teaching*, and the standards for new teachers created by the Interstate New Teacher Assessment and Support Consortium help identify the characteristics of good teaching and allow teachers to know what is being evaluated (Danielson, 1996; Ryan & Cooper, 2004). The work of Danielson, INTASC, and Educational Testing Service will help make teacher evaluation more objective and therefore, help avoid the problems faced by past attempts at differentiating pay.

The professional benchmarks for a knowledge and skills based pay structure suggested by The Consortium for Policy Research in Education (CPRE) are strongly supported by the results of this research. These knowledge and skills based plans include the criteria that were scored the highest by teachers on the questionnaire.

Teachers also seem to agree that teachers who are willing to teach in schools where students are perceived as more difficult to teach should be paid more. The implication is that providing higher pay for teachers in these schools has a possibility of being accepted by teachers.

Even though the *No Child Left Behind Act* had states to create a common assessment to test student achievement, and current technology provides a way to grade tests and publish results quickly, the findings of this study show that teachers do not agree that student achievement based on test scores should be used to differentiate their pay. Two thirds of the teachers in this study said that standardized tests were not a good criterion to determine who should receive extra pay. It did not matter whether the test was a national norm-referenced test, a state criterion referenced test, or a local standardized test.

Procedures have been developed and technology has been advanced to provide for the tracking of student achievement and teacher effectiveness (Sanders & Horn, 1997). This process has been used in such programs as the Dallas Value-Added Assessment System and the Tennessee Value Added Assessment System. These systems have been evaluated as both positive and negative by different experts ( Darling-Hammond, 2005; Darlington, 1997; Goldhaber, 2006; Hershberg, 2005; Milman, 1997). The findings in this study indicate that teachers would not agree that this type of data would be acceptable for differentiating their pay. It is likely that teachers perceive differentiating pay based on this data would cause the negative outcomes listed on the questionnaire. Mean scores for these negative outcomes showed that teachers believed differentiating pay in this way would harm morale, cause resentment and undesirable competition among teachers. They also believed it would cause teachers to want only bright students and cause them to avoid disadvantaged students, special education students, and English language learners. The findings imply that rather than advancing organizational goals, this type of differentiated pay might hinder organizational goals.

The findings indicate that differentiating pay based on test scores, peer evaluations, parent satisfaction and student attendance would meet with resistance from teachers and should be considered only with more study about how teachers would react to the changes. Dialogue with teachers is critical to the success of a differentiated pay structure. Teachers need to view a new pay system as fair and equitable. They need time to understand the background information and reasoning used to create the new pay structure.

## Suggestions for Further Inquiry

The sample in this study included teachers in a large metropolitan school system. Teachers in more rural or smaller systems may think differently about differentiated pay. Further research is needed with a sample of teachers in smaller and more rural areas.

The questionnaire for this study collected a wide range of demographic information along with the responses to the items in the questionnaire. For this study only the data on years of experience were examined to determine if there was a correlation between years of experience and positive or negative attitudes about differentiated teacher pay. Further study is needed to analyze the other demographic items and how they relate to responses on the questionnaire about differentiated pay.

More research is needed to determine why teachers react negatively to the use of student achievement data and test scores as a way to differentiate their pay. Responses to the open-ended question 33 indicate that teachers are concerned about the differences between the types of students that some teachers have compared to their colleagues. They perceive that the system would unfairly penalize teachers with economically disadvantaged students, special education students, and English language learners. More

research about implementing a system that uses test scores and the reactions of teachers is needed.

Teachers perceive that positive outcomes will not occur with differentiated pay. A closer look at exactly why they believe the outcomes would not be positive is needed. Exactly why do they only moderately agree that differentiated pay will not attract more qualified candidates or improve teacher quality? Why is it that they do not see differentiated pay as helping to improve student achievement? Do they have any ideas about how pay could be changed to encourage ineffective teachers to change their practice?

Research is needed to find a plan that would fairly and accurately determine which teachers are the most effective. The plan should not rely on one measure but should be broad based. It must meet with approval of the teachers it affects. It might include both test scores and observations. Sanders (1997) value added assessment provides a mathematical approach of determining effectiveness. The work of Danielson's (1996) Framework for Teaching, The National Board for Professional Teaching Standards, and the work of The Interstate New Teacher Assessment and Support Consortium (INTASC) provide clear and observable characteristics for evaluation. The Educational Testing Service provides PRAXIS tests that help determine proficiency of teachers. More research is needed on the use of these tools to differentiate teacher pay.

## Conclusion

The importance of reforming America's educational system so that America maintains preeminence as a world power is made clear by Friedman (2005) as he names ten developments that have leveled the playing field of the global economy. Among

those developments are the development of Microsoft Windows and the Netscape browser. These developments made outsourcing, off-shoring, open sourcing, insourcing, and supply-chaining possible. These developments mean that American students now compete with students world wide for jobs and opportunity. It is crucial that American educators make appropriate changes to our educational system to produce students that are competitive in this new knowledge economy.

Teacher pay structures have the potential for improving the quality of our nation's education system. Since the 1980s policymakers have repeatedly tried to implement various forms of differentiated pay. Even though these plans have met with criticism and have not been sustained, experts continue in their attempts to find a plan that works. If properly planned and implemented, the effects of a new pay structure could improve the ability of the United States to compete in a global market. If poorly planned and implemented, new pay structures can undermine the goal of an improved educational system that educates students to high levels. The results of this study indicate that there is a gap between the attitudes and perceptions of teachers and the policy recommendations of several national commissions including the National Center on Education and the Economy (2007) and The Teaching Commission (2004). Teachers must be made aware of the logic that has resulted in the recommendations these commissions have made about teacher pay. They need time to process and understand the recommendations that are being discussed. The largest number of responses to the open-ended question were in the category named suggestions for differentiated pay. This indicates that teachers are interested and want to have input. More research about teacher

attitudes and perceptions and communication between policymakers and teachers must take place before teacher pay structures can be effectively changed.

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# APPENDICES

# APPENDIX A

## FINAL QUESTIONNAIRE

*The University of Georgia*
*College of Education*
*Lifelong Education, Administration, & Policy*
*Educational Administration and Policy Program*

# Teachers' Opinions About Differentiated Pay

There is no doubt that the late 1990s and early 2000s will be remembered as an era of accountability for teachers. The public, lawmakers, and policy makers are beginning to discuss new structures for teacher pay that could replace a single salary schedule based on college degrees and years of service. Considering the current atmosphere, it is critically important to know how teachers view differentiated teacher pay. Please indicate the extent to which you agree with each of the following statements.

## Section I. Possible Criteria for Differentiated Teacher Pay

| *To what extent do you agree with each of the following statements?* | *Disagree ←→ Agree* | | | | | |
|---|---|---|---|---|---|---|
| 1. Teachers should be paid more if they have earned advanced college degrees …… | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Teachers should be paid more if they have National Board of Professional Teaching Standards Certification …….. | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. Teachers should be paid more if they participate in professional learning activities after contract time …….. | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Teachers should be paid more if they have more years of experience ……... | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Teachers should be paid more if they are favorably evaluated by a peer …….. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. Teachers should be paid more if they are favorably evaluated by an administrator ……. | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. Teachers should be paid more if parents show satisfaction with their work……. | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. Teachers should be paid more if their students have high scores on a standardized norm-referenced test…… | 1 | 2 | 3 | 4 | 5 | 6 |

| *To what extent do you agree with each of the following statements?* | *Disagree ←→ Agree* | | | | | |
|---|---|---|---|---|---|---|
| 9. Teachers should be paid more if their students have high scores on the state criterion-referenced test…… | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. Teachers should be paid more if their students have high scores on a district level criterion-referenced test…… | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Teachers should be paid more if their students show documented improvement when compared to a pretest or baseline data …….. | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Teachers should be paid more if their students have high attendance rates…… | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. Teachers should be paid more if fewer of their students are retained…… | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. Teachers should be paid more if they teach in low performing schools …… | 1 | 2 | 3 | 4 | 5 | 6 |

## Section II. Possible Consequences of Differentiated Teacher Pay

As policy makers make changes to teacher pay structures, there may be both positive and negative consequences to differentiating teacher pay based on factors other than college degrees and years of experience. Teachers are in an excellent position to explore the consequences that will occur with a differentiated pay system. Please indicate the extent to which you agree with each of the following statements.

| *To what extent do you agree with each of the following statements?* | *Disagree ←→ Agree* | | | | | |
|---|---|---|---|---|---|---|
| 15. Differentiated pay will increase student performance…… | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Differentiated pay will improve teaching quality…… | 1 | 2 | 3 | 4 | 5 | 6 |
| 17. Differentiated pay will cause ineffective teachers to change their teaching practices…….. | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. Differentiated pay will cause ineffective teachers to leave the profession…….. | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. Differentiated pay will reward good teaching …… | 1 | 2 | 3 | 4 | 5 | 6 |

| ***To what extent do you agree with each of the following statements?*** | ***Disagree ←→Agree*** |
|---|---|
| 20. Differentiated pay will attract more qualified candidates to the profession……. | 1 2 3 4 5 6 |
| 21. Differentiated pay will improve public perceptions of teaching as a profession…….. | 1 2 3 4 5 6 |
| 22. Differentiated pay will satisfy lawmakers' desire for accountability…… | 1 2 3 4 5 6 |
| 23. Differentiated pay will cause undesirable competition among teachers……. | 1 2 3 4 5 6 |
| 24. Differentiated pay will interfere with collaboration among teachers……. | 1 2 3 4 5 6 |
| 25. Differentiated pay will harm teacher morale……. | 1 2 3 4 5 6 |
| 26. Differentiated pay will lead to resentment among lower paid teachers……. | 1 2 3 4 5 6 |
| 27. Differentiated pay will cause teachers to want to have only bright, hard-working students in their class…….…… | 1 2 3 4 5 6 |
| 28. Differentiated pay will cause teachers to avoid having socially disadvantaged students in their classes.…..…….. | 1 2 3 4 5 6 |
| 29. Differentiated pay will cause teachers to avoid having special education students in their classes…… | 1 2 3 4 5 6 |
| 30. Differentiated pay will cause teachers to avoid having students whose first language is not English in their classes..... | 1 2 3 4 5 6 |
| 31. Differentiated pay will take the creativity out of teaching…… | 1 2 3 4 5 6 |
| 32. Differentiated pay will cost tax payers too much money…….. | 1 2 3 4 5 6 |

Please continue to complete the back page.

33. Do you have additional comments about differentiated teacher pay?

## Section III. Demographic Information

34. In what year were you born? _____

35. What is your race/ethnicity? _____

36. What is your gender? _____

37. Have you earned National Board of Professional Teaching Standards Certification?

    Circle one. Yes No

38. What is your highest degree? _____

39. What level do you teach? Circle all that apply. Elementary Middle High

40. What is your current job title? Circle one.

    Teacher Administrator Other (please specify) _____

41. How many years of teaching experience do you have? _____

42. Did your school meet Annual Yearly Progress during 2006-07? _____

43. Is your school a Title One School? _____

44. Do you teach students who are English language learners? _____

45. Do you teach special education students? _____

**Thank you for helping with this important research.**

# APPENDIX B

# ITEM POOL FOR PROTOTYPE QUESTIONNAIRE

Item Pool for Prototype

Mary Jane MacLeod Issues and Trends in Adult Education June 30, 2003
EADU 8610

Construct: Tying Teacher pay to student achievement

1. What attitudes do teachers have about tying their pay to student achievement?
2. What measures would teachers accept as indicators of their student's achievement?
3. What measures are appropriate to measure student achievement?
4. Would teachers be motivated to change their behavior if pay were tied to student achievement?

**Item Pool**

**From literature:**

Below is a list of indicators of student's achievement. To what degree should they be tied to teacher pay?

% of students taking advance placement courses
ACT
SAT
Discipline, truancy, suspensions expulsion
Dropout rate
Graduation rate
Retention rate
Student attendance
Student achievement scores-local
Student achievement scores-state
ITBS
Stanford Nine

**From relevant parties:**

Projects
Teacher observation
CRCT
Parental input (satisfaction)

# APPENDIX C

# PROTOTYPE QUESTIONNAIRE

Prototype Questionnaire

**Teacher Pay Survey**

There is no doubt that the late 1990's and early 2000's will be remembered as an era of accountability for teachers. Considering this current atmosphere, teacher's attitudes about their pay take on added importance. Please take a few moments to answer each of the following questions.

To what extent do you agree that the following areas should be used as a basis for teacher pay.

| **Seniority** | Disagree | | | ↔ | | Agree |
|---|---|---|---|---|---|---|
| 1. Total years of teaching experience | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. Years teaching same subject or grade | 1 | 2 | 3 | 4 | 5 | 6 |
| **Effort** | | | | | | |
| 3. Number of students taught | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. Number of classes taught | 1 | 2 | 3 | 4 | 5 | 6 |
| 5 Number of special ed students taught | 1 | 2 | 3 | 4 | 5 | 6 |
| **Student Achievement** | | | | | | |
| 6. % of students taking advanced placement courses | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. ACT Scores | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. SAT Scores | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. Dropout rate | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. Graduation rate | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Retention rate | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. Student attendance | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. Student scores on local test | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. Student scores on state test | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. Iowa Test of Basic Skills | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. Stanford Nine | 1 | 2 | 3 | 4 | 5 | 6 |

If your pay is tied to your students' achievements, what measures would be most acceptable to you as an indicator that your students are performing well enough for you to receive increased pay?

**Background Information**.

In what year were you born? _____

What is your race/ethnicity? _____

What is your gender?_____

At what academic level do you teach?

Circle one: Elementary Middle High School

Thank you for completing this survey.
An envelope has been provided to collect the surveys from the group.

# APPENDIX D

## ITEM POOL FOR PRELIMINARY FIELD TEST

Item Pool for Preliminary Field Test

Possible Survey Questions for Dissertation

What teachers know:
What teachers do:
Student Achievement:

Teachers who earn National Board Certification should receive extra pay.

Teachers who are willing to mentor other teachers should be paid more.

I would work harder to make sure my students passed the CRCT if my pay was increased when more students passed.

I would work harder to make sure my students did well on the CogAT if my ay ere increased based on high performance.

My instruction has little effect on student CogAT scores.

My instruction has little effect on student ITBS scores.

My instruction has little effect on student CRCT scores.

Student performance on standardized tests is determined by their socioeconomic status.
Teachers who show demonstrated ability to teach students of low sociaoeconomic status.
Student performance on standardized tests is determined by parent involvement.

Student performance on standardized tests is affected by teacher competence.

Should teacher pay be a one time bonus or added permanently to teacher pay.

One hundred dollars a month increase in pay is a significant amount.

Fifty dollars a month increase in pay is a significant amount.
One hundred dollars a month increase in pay is a significant amount.
Two hundred dollars a month increase in pay is a significant amount.
Five hundred dollars a month increase in pay is a significant amount.

A fifty dollar one time bonus is a significant amount.
A one hundred dollar one time bonus is a significant amount.
A two hundred dollar one time bonus is a significant amount.
A five hundred dollar one time bonus is a significant amount.

Item Pool for survey

A peer teacher should evaluate my teaching performance.
An administrator should evaluate my teaching performance.
I would prefer to have a peer evaluate my teaching performance rather than an administrator.
If I were paid more money when my students scored better on a standardized test, I would try harder to teach each student.
Teacher pay should be based on whether their students learn.
Not all teachers should receive the same pay.
Some teachers should be paid more than others.
Teachers should be paid more if they have higher college degrees.
High School Teachers should be paid more than middle and elementary school teachers.
Middle School teachers should be paid more than high school and elementary school teachers.
Elementary School teachers should be paid more than high school and middle school teachers.
Teachers with National Board certification from the National Board of Professional Teaching Standards should be paid more.
I would teach the same way no matter how much money I was paid.
The teachers in my school would work harder if we could earn a pay increase Together.
Fifty dollars is enough of a bonus to make me work harder.
One hundred dollars is enough of a bonus to help me work harder.
One thousand dollars is enough of a bonus to help me work harder.
Earning extra supplies would help motivate me to work harder.

Teachers who know their subject matter better should be paid more.
Teachers who possess a wide variety of teaching strategies should be paid more.
Teachers who reflect on their teaching should be paid more.
Teachers who work well with their peers should be paid more.
Teachers who communicate with parents should be paid more.
Teachers who establish rapport with their students should be paid more.
Increasing teacher pay for those teachers whose students do well on standardized tests will improve student achievement.
A system of rewards and sanctions that are contingent upon student test scores on the CRCT will improve the quality of schools in Georgia.

Categories:
Motivation
Years of Experience
Advance college degrees
Training

Student Achievement
Type of student
Course taught (ie science, math, advance social studies or language arts)
Quality of teaching (as judged by whom)
Knowledge of content
Knowledge of pedagogy
Communication
Classroom climate (rapport)

A peer teacher should evaluate my teaching performance.
An administrator should evaluate my teaching performance.
I would prefer to have a peer evaluate my teachering performance rather than an administrator.
If I were paid more money when my students scored better on a standardized test, I would try harder to teach each student.
Teacher pay should be based on whether their students learn.
Not all teachers should receive the same pay.
Some teachers should be paid more than others.
Teachers should be paid more if they have higher college degrees.
High School teachers should be paid more than middle and elementary school teachers.
Middle School teachers should be paid more than high school and elementary teachers.
Elementary School teachers should be paid more than high school and middle school teachers.
I would teach the same way no matter how much money I was paid.
The teachers in my school would work harder if we could earn a pay increase Together.
Fifty dollars is enough of a bonus to help me work harder.
One hundred dollars is enough of a bonus to help me work harder.
One thousand dollars is enough of a bonus to help me work harder.

Categories:
Motivation
Years of Experience
Advanced college degrees
Training
Student Achievement
Type of student
Course taught (ie

# APPENDIX E

## THREE SAMPLE SURVEYS FOR PRELIMINARY FIELD TEST

Three Samples Surveys for Preliminary Field Test

**Sample Survey One**
**Teacher Pay Survey**

There is no doubt that the late 1990's and early 2000's will be remembered as an era of accountability for teachers. The public, lawmakers, and policy makers are beginning to discuss new structures for teacher pay that replace the single salary schedule that now pays teachers based on college degree and years of service. Considering the current atmosphere, teacher's attitudes about their pay take on added importance. Please take a few moments to answer each of the following questions.

To what extent do you agree with the following statements about teacher pay:

| Survey one | **Disagree Agree** |
|---|---|
| Teachers should be paid more if they have earned advanced college degrees. | 1 2 3 4 5 6 |
| Teachers should be paid more if they have National Board Certification. | 1 2 3 4 5 6 |
| Teachers should be paid more if they have more years of experience. | 1 2 3 4 5 6 |
| Teachers should be paid more if they are favorably evaluated by a peer. | 1 2 3 4 5 6 |
| Teachers should be paid more if they are favorably evaluated by an administrator. | 1 2 3 4 5 6 |
| Teachers should be paid more if their students have high attendance rates. | 1 2 3 4 5 6 |
| Teachers should be paid more if fewer of their students are retained. | 1 2 3 4 5 6 |
| The following may be included? | |
| Teachers should be paid more if they show written reflections about their teaching. | 1 2 3 4 5 6 |
| Teachers should be paid more if parent surveys show satisfaction with their work. | 1 2 3 4 5 6 |
| Teachers should be paid more if their peers rate them highly for collegiality. | 1 2 3 4 5 6 |
| Teachers should be paid more if their students have high scores on the CRCT. | 1 2 3 4 5 6 |

| | |
|---|---|
| Teachers should be paid more if their students have high scores on the CogAT. | 1 2 3 4 5 6 |
| Teachers should be paid more if their students have high scores on the ITBS. | 1 2 3 4 5 6 |
| Teachers should be paid more if their students have high scores on the Gateway. | 1 2 3 4 5 6 |

Did your school meet AYP during the 2004-2005 school year?
Yes No Don't know

If your pay is tied to your students' achievements, what measures would be most acceptable to you as an indicator that your students are performing well enough for you to receive increased pay?

**Background Information**

In what year were you born? _____

What is your race/ethnicity? _____

What is your gender?_____

Thank you for completing this survey.
An envelope has been provided to collect the surveys from the group.

Sample Survey Two

There is no doubt that the late 1990's and early 2000's will be remembered as an era of accountability for teachers. The public, lawmakers, and policy makers are beginning to discuss new structures for teacher pay that replace the single salary schedule that now pays teachers based on college degree and years of service. Considering the current atmosphere, teacher's attitudes about their pay take on added importance. Please take a few moments to answer each of the following questions.

To what extent do you agree with the following statements about teacher pay:

| Survey two<br><br>Teacher pay should be based on: | strongly disagree strongly agree |
|---|---|
| advanced college degrees.<br>National Board Certification.<br>years of experience. | 1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 2 3 4 5 6 |
| favorable evaluations by a peer.<br>favorable evaluations by an administrator.<br>their students' attendance rates.<br>Their number of students retained in same grade.<br><br>The following may be included?<br>written reflections about their teaching.<br>parent surveys that show satisfaction with their work.<br>peer ratings that show high collegiality. | 1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br><br><br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 2 3 4 5 6 |
| Their students' high scores on the CRCT.<br>Their students' high scores on the CogAT.<br>Their students' high scores on the ITBS.<br>Their students' high scores on the Gateway. | 1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 2 3 4 5 6 |

Did your school meet AYP during the 2004-2005 school year?
Yes No Don't know

If your pay is tied to your students' achievements, what measures would be most acceptable to you as an indicator that your students are performing well enough for you to receive increased pay?

**Background Information**

In what year were you born? _____

What is your race/ethnicity? _____

What is your gender?_____

Thank you for completing this survey.
An envelope has been provided to collect the surveys from the group.

Sample Survey Three

There is no doubt that the late 1990's and early 2000's will be remembered as an era of accountability for teachers. The public, lawmakers, and policy makers are beginning to discuss new structures for teacher pay that replace the single salary schedule that now pays teachers based on college degree and years of service. Considering the current atmosphere, teacher's attitudes about their pay take on added importance. Please take a few moments to answer each of the following questions.

To what extent do you agree with the following statements about teacher pay:

| Survey three<br><br>To what extent should each of the following be used to determine teacher pay? | Disagree | | | | | Agree | |
|---|---|---|---|---|---|---|---|
| advanced college degrees. | 1 | 2 | 3 | 4 | 5 | 6 | |
| National Board Certification. | 1 | 2 | 3 | 4 | 5 | 6 | |
| years of experience. | 1 | 2 | 3 | 4 | 5 | 6 | |
| favorable evaluations by a peer. | 1 | 2 | 3 | 4 | 5 | 6 | |
| favorable evaluations by an administrator. | 1 | 2 | 3 | 4 | 5 | 6 | |
| their students' attendance rates. | 1 | 2 | 3 | 4 | 5 | 6 | |
| Their number of students retained in same grade. | 1 | 2 | 3 | 4 | 5 | 6 | |
| The following may be included? | | | | | | | |
| written reflections about their teaching. | 1 | 2 | 3 | 4 | 5 | 6 | |
| parent surveys that show satisfaction with their work. | 1 | 2 | 3 | 4 | 5 | 6 | |
| peer ratings that show high collegiality. | 1 | 2 | 3 | 4 | 5 | 6 | |
| Their students' high scores on the CRCT. | 1 | 2 | 3 | 4 | 5 | 6 | |
| Their students' high scores on the CogAT. | 1 | 2 | 3 | 4 | 5 | 6 | |
| Their students' high scores on the ITBS. | 1 | 2 | 3 | 4 | 5 | 6 | |
| Their students' high scores on the Gateway. | 1 | 2 | 3 | 4 | 5 | 6 | |

Did your school meet AYP during the 2004-2005 school year?

Yes No Don't know

If your pay is tied to your students' achievements, what measures would be most acceptable to you as an indicator that your students are performing well enough for you to receive increased pay?

**Background Information**

In what year were you born? _____

What is your race/ethnicity? _____

What is your gender?_____

Thank you for completing this survey.
An envelope has been provided to collect the surveys from the group.

# APPENDIX F

## PRELIMINARY FIELD TEST QUESTIONNAIRE

**TEACHER PAY SURVEY**

There is no doubt that the late 1990s and early 2000s will be remembered as an era of accountability for teachers. The public, lawmakers, and policy makers are beginning to discuss new structures for teacher pay that replace the single salary schedule that now pays teachers based on college degree and years of service. Considering the current atmosphere, teacher's attitudes about their pay take on added importance. Your completion of this survey implies your consent that the data may be used for research purposes. Please take a few moments to rate each of the following statements.

To what extent do you agree with the following statements about teacher pay:

| Survey | **Disagree Agree** |
|---|---|
| 1. Teachers should be paid more if they have earned advanced college degrees…….. | 1 2 3 4 5 6 |
| 2. Teachers should be paid more if they have National Board of Professional Teaching Standards Certification…… | 1 2 3 4 5 6 |
| 3. Teachers should be paid more if they participate in professional learning activities after contract time…… | 1 2 3 4 5 6 |
| 4. Teachers should be paid more if they have more years of experience…….. | 1 2 3 4 5 6 |
| 5. Teachers should be paid more if they are favorably evaluated by a peer…….. | 1 2 3 4 5 6 |
| 6. Teachers should be paid more if they are favorably evaluated by an administrator…… | 1 2 3 4 5 6 |
| 7. Teachers should be paid more if parent surveys show satisfaction with their work…… | 1 2 3 4 5 6 |
| 8. Teachers should be paid more if their students have high scores on the state criterion-referenced test (CRCT)……. | 1 2 3 4 5 6 |
| 9. Teachers should be paid more if their students have high scores on a standardized norm-referenced test (ITBS)…….. | 1 2 3 4 5 6 |
| 10. Teachers should be paid more if their students have high scores on a county level criterion-referenced test (Gateway)…… | 1 2 3 4 5 6 |
| 11. Teachers should be paid more if their students have high attendance | 1 2 3 4 5 6 |

| | |
|---|---|
| rates…….<br><br>12. Teachers should be paid more if fewer of their students are retained…….. | 1 2 3 4 5 6 |

13. If your pay is tied to your students' achievements, what measures would be most acceptable to you as an indicator that your students are performing well enough for you to receive increased pay?

**Background Information**

14. In what year were you born? _____

15. What is your race/ethnicity? _____

16. What is your gender?_____

17. Have you earned National Board of Professional Teaching Standards Certification? _____

18. What is your highest college degree? _____

19. What is your current job title? _____

20. How many years of teaching experience do you have? _____

21. Did your school meet AYP during the 2004-2005 school year?

Yes No Don't know

Thank you for completing this survey.
An envelope has been provided to collect the surveys from the group.

# APPENDIX G

## CODEBOOK FOR OPEN ENDED RESPONSES

Codebook for Open-ended Items
Mary Jane MacLeod Pilot Survey
Factors that Teachers Find Acceptable for Enhancing Their Pay

| Item Number | Item | Code |
|---|---|---|
| I15 | Ethnicity | 1=White (Caucasian)<br>2 =African American (Black) |
| I16 | Gender | 1=Male<br>2=Female |
| I17 | Certification | 1=yes<br>2=no |
| I18 | Highest College Degree | 1=undergraduate<br>2=Bachelor (4 year degree)<br>3= Masters<br>4=Specialist<br>5=Doctorate |
| I19 | Job Title | 1=teacher<br>2=administrator<br>3=special ed teacher<br>4=student<br>5=parent<br>6=migrant education<br>7=policeman<br>8-program organizer 4H<br>9=social worker<br>10=educator |
| I21 | Meeting AYP | 1=yes<br>2=no<br>3=not applicable |

# APPENDIX H

## OPEN ENDED RESPONSES TO PELIMINARY FIELD TEST

Open Ended Question Responses to Question 13
Pilot Survey

Mary Jane MacLeod Factors Teachers Find Acceptable For Enhancing Their Pay

Q.13 If your pay is tied to your students' achievements, what measures would be most acceptable to you as an indicator that your students are performing well enough for you to receive increased pay?

| Respondent number | Response |
|---|---|
| 1 | Grades in class |
| 2 | Student attitudes about school, school work, learning<br>Also the progress a student makes rather than test scores |
| 3 | Have a pretest at the beginning of the year and a post test at the end to see growth during that year.<br>Not all schools and students start at the same place academically and can't take all students to exceed standards. |
| 4 | Pre/post test scores over subject matter, must show percentage of improvement to prove you have taught them something |
| 5 | Looking at the degree of what was learned. For example, if a student knew 20% of the material on a post test and at the end of the course the student knows 70% that's a big improvement even though it's only a D. Gifted teacher and AP endorsed teacher should have increased pay as well. |
| 6 | If it must be tied to student achievement, then I guess that retention rate would be the fairest indicator, although I must point out that many students would start getting passed despite whether or not they know the material |
| 7 | If achievement was the measuring stick, I would want the indicator to be a local test, such as the gateway, however, I think students are currently suffering because teachers teach to much to a test. Student performance should be judged on what they have learned and how they have improved as an individual not on if they have achieved some national standard. |
| 8 | Measurements of improvement in subject area most in need-for lower achieveing students<br>Measurements of achievement –for higher achieving students |
| 9 | How much they improve from Day one of the school year to Day 180. |
| 10 | A measure of the level of improvement the students have made over the year. I am not sure how to measure this accurately. |
| 11 | Student growth from beginning of year to end of year |
| 12 | |
| 13 | Standardized test score, student portfolios, peer evaluation (next grade) students improvement year over year |

| | |
|---|---|
| 14 | Gifted (Coordinator should assess us/parent surveys/peer surveys (work) would be welcomed. |
| 15 | 1.End of course test results-pass<br>2. Positive student and parent evaluations<br>3. GHSGT/GHSWT<br>4. High School Graduation number increase<br>5. Portfolio Assessment<br>6 Combination of all above |
| 16 | Portfolio assessment of student progress would be a good way to ascertain individual progress of students. Professional development that demonstrates growth would be a way of assessing teaching, too such as what is required for NBCT with videotapes, written commentaries etc. about what/how the teacher has learned in working with students. |

# APPENDIX I

## DATA PROBLEM LIST FOR PRELIMINARY FIELD TEST

Data Problem List for Preliminary Field Test

Mary Jane MacLeod

Factors Teachers Find Acceptable for Enhancing Their Pay

| Respondent Number | Item | Comment |
|---|---|---|
| 1 | | Suggested that I use a rating scale of 5 to show strength of how much the respondent agrees or disagrees |
| 1 | 13 | Commented this was obscure, suggested I give choices |
| 10 | | Suggested that I use a rating scale of 5 to allow respondents to answer neutral |
| 16 | 19 | Respondent put educator which could mean teacher or administrator. I did not know how to code this answer. |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

# APPENDIX J

## ITEM POOL FOR REVISED QUESTIONNAIRE

Item Pool for Revised Survey

Positive Consequences of Differentiated Pay

1. Increased student performance
2. Improve teaching quality
3. Weed out weak teachers
4. Force teachers to do their job
5. Reward good teaching
6. Attract more qualified candidates
7. Improved public perceptions of teaching
8. Satisfy lawmakers

Negative Consequences of Differentiated Pay

1. Encourages competition rather than collaboration
2. Does not align with Union environment-if teachers wanted merit pay they would have asked for it
3. Defining a recognizing "good teaching" (evaluation)
4. Validity and reliability of tests used for student achievement
5. Nobody wants to teach disadvantaged students
6. Bias and favoritism by evaluators
7. Takes the creativity/individuality out of teaching
8. Rewards good teachers but does nothing to improve poor teachers
9. Costs of implementing the system are very large
10. Teachers should want to serve kids and love teaching not be in it for the money
11. Teachers are forced to work harder to get more money and the extra pay is not sufficient for the work required
12. If names of teachers who receive extra pay are posted, parents will either disagree or want their child in a different class
13. It is out of order to compare education to business
14. Performance based compensation cannot be imposed from the outside
15. Education is actually doing fine, why rock the boat?

Differentiated pay will increase student performance
Differentiated pay will improve teacher quality
Differentiated pay will weed out weak teachers
Differentiated pay will force bad teachers to do their job

Differentiated pay will force slackers to do their job
Differentiated pay will force all teachers to do a better job
Differentiated pay will reward good teachers
Differentiated pay is a good way to reward good teachers
Differentiated pay will attract more qualified candidates to the teaching field
Differentiated pay will improve public perceptions of teachers
Differentiated pay will satisfy lawmakers
Differentiated pay will make lawmakers allocate more money to teacher salaries

Differentiated pay will cause competition among teachers
Differentiated pay will hurt teacher collaboration
Differentiated pay will hurt morale of teachers
Differentiated pay will cause divisiveness on faculties
Differentiated pay will cause infighting
Differentiated pay will cause problems with union negotiations
Differentiated pay will cause teachers to want to teach the socially advantaged
Differentiated pay will cause teachers to want to teach only bright students
Differentiated pay will cause teachers to want to teach only hard working students
Differentiated pay will cause teachers to avoid socially disadvantaged students
Differentiated pay will cause teachers to avoid students whose first language is not English
Differentiated pay will cause teachers to avoid teaching special education students
Differentiated pay will take creativity and autonomy out of teaching
Differentiated pay based on tests scores is unfair
Differentiated pay based on evaluations is unfair
Differentiated pay will help weak teachers improve their teaching
Differentiated pay will cost tax payers too much
Differentiated pay takes away a teachers love of teaching
Differentiated pay takes away a teachers love of students
Differentiated pay will make parents angry
Differentiated pay will make parents dissatisfied
Education cannot be compared to business
There is no need to change the teacher pay system
Teachers will resent a differentiated pay system
Student Achievement for differentiated pay should be based on more than one test
Teacher Evaluations for differentiated pay should be completed by more than one person

# APPENDIX K

## LETTER TO ADMINISTRATORS REQUESTING PARTICIPATION

Letter Requesting Participation

(University of Georgia Letterhead)

Date

Dear Fellow Administrator:

As a fellow educator, I am sure you are aware that the public, lawmakers, and policymakers are discussing the issues of teacher quality and its impact on student learning. The No Child Left Behind Act has called for a *highly* qualified teacher in every classroom. Many policymakers are discussing teacher pay as a method to recruit and retain quality teachers. They are suggesting that the single salary schedule that pays teachers based on their degree and years of experience be changed to include factors to differentiate teacher pay.

As a doctoral student at the University of Georgia under the direction of Dr. Catherine Sielke, I am currently studying research on the factors that teachers would find acceptable to differentiating their pay. I am also interested in whether there are any negative effects to changing from the single salary schedule to a differentiated pay structure. Teachers have a major stake in the reforms that might be used to determine their pay. Researchers suggest that teachers have major involvement in these reforms. This research could be useful to policymakers who are making decisions about teacher pay reform.

Since this is an unfunded research project, I cannot afford to pay teachers for their time to complete a questionnaire. I am hoping that you and your staff will be willing to help me by distributing and completing a teacher questionnaire during a regular faculty meeting. The request is that all certified teachers on you staff complete the survey which takes about 15 minutes. The entire amount of time would be 20 minutes to include directions and collection of the completed questionnaires.

If you are willing to help, you would follow these steps:

1. Take the directions, questionnaires, and return envelopes to the faculty meeting.
2. Read the standardized directions to the staff and allow them 15 minutes to complete the questionnaire.
3. Ask the teachers to place the questionnaires in one of the completed questionnaire envelopes.
4. Return the envelopes to me in person if I am present or through Gwinnett County courier if I am not there.

I am hopeful that these questionnaires will be completed by August 18, 2007. If you have any questions concerning the study, you may contact me at (phone) or (email address).

Sincerely,

Mary Jane MacLeod

# APPENDIX L

# COVER LETTER FOR SURVEY

*The University of Georgia*
*College of Education*
*Lifelong Education, Administration, & Policy*
*Educational Administration and Policy Program*

August 1, 2007

Dear Fellow Educator:

School systems across the nation are beginning to discuss changes in the way teachers are paid. Currently teachers are paid based on their college degree and years of experience. Policymakers are considering changing this practice to include paying teachers based on different criteria. Many experts are recommending that teachers have a voice in these changes. I am a doctoral student under the direction of Dr. Catherine Sielke in the Department of Educational Administration and Policy at The University of Georgia. I invite you to participate in a research study entitled Differentiated Pay for Teachers. It is critically important to know how teachers view differentiated pay. The purpose of this study is to explore and explain teacher attitudes about differentiated pay with the hope that policymakers will use the results as they make changes to teacher pay structures.

Your participation will involve completing a 45 item survey and should only take about ten minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits. Your responses will be anonymous. The results of the research study may be published, but your name will not be used. In fact, the published results will be presented in summary form only. Your identity will not be associated with your responses in any published format. There are no known risks or discomforts associated with this research. By completing and returning this questionnaire in the envelope provided, you are agreeing to participate in the above described research project.

If you have any questions about this research project, please feel free to call me, Mary Jane MacLeod, at (phone) or send an e-mail to (email). Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 612 Boyd GSRC, Athens, Georgia 30602-7411; telephone (706) 542-3199; email address irb@uga.edu.

The findings from this project may provide information on possible ways to change teacher pay structures in a positive way. It is critical that the teacher's voice be heard. Thank you for your participation in this important research! Please keep this letter for your records.

Sincerely,

Mary Jane MacLeod

# APPENDIX M

## INSTRUCTIONS FOR ADMINISTRATION OF QUESTIONNAIRE

**Instructions for administering the Teacher Pay Questionnaire**

Administrators please read the following instructions to your teachers:

You are being asked to participate in a study being conducted by the University of Georgia. The study is designed to determine what factors teachers find acceptable for differentiating their pay and if there are any negative effects to basing teacher pay on factors other than level of degree and years of experience. Each item on the survey has been mentioned as a factor to differentiate pay or a result that differentiated pay will have on teachers and students. We need to know to what extent you agree or disagree with these statements.

Your name will not appear on the survey: therefore, your responses are anonymous. **This survey is a voluntary activity. You are not required to participate, and there will be no penalty if you choose not to participate.**

# APPENDIX N

# CODEBOOK FOR FINAL SURVEY

Codebook for Demographic Information
Final Questionnaire 2
Teachers' Opinions about Differentiated Pay

| Item Number | Item | Code |
|---|---|---|
| I35 | Ethnicity | 1=White (Caucasian)<br>2 =African American (Black)<br>3=Asian<br>4=Hispanic<br>5=Native American<br>6=other<br>7=mulitracial |
| I36 | Gender | 1=Male<br>2=Female |
| I37 | Certification | 1=yes<br>2=no |
| I38 | Highest College Degree | 1=undergraduate<br>2=Bachelor (4 year degree)<br>3= Masters<br>4=Specialist<br>5=Doctorate |
| I39 | Level | 1=Elementary<br>2=Middle<br>3=High<br>4=Multiple levels |
| I40 | Job Title | 1=teacher<br>2=administrator<br>3=special ed teacher<br>4=media specialist<br>5=instructional coach<br>6=paraprofessional<br>7=support staff (clerical)<br>8=reading specialist<br>9=counselor<br>10=speech pathologist<br>11=substitute teacher |

| | | |
|---|---|---|
| I42 | Meeting AYP | 1=yes<br>2=no |
| I43 | Title One | 1=yes<br>2=no |
| I44 | ELL students | 1=yes<br>2-no |
| I45 | Special Ed students | 1=yes<br>2=no |

# APPENDIX O

## DATA PROBLEM LIST FOR FINAL SURVEY

Data Problem List Final Survey

Mary Jane MacLeod

Factors Teachers Find Acceptable for Enhancing Their Pay

| Respondent Number | Item | Comment |
|---|---|---|
| 10 | 4 | Respondent wrote: "All years of experience from state to state!" |
| 32 | 17 | Respondent wrote: "for the worse." Researcher eliminated this item. |
| 49 | 28-31 | Respondent drew an arrow beside these items and wrote: "how would you avoid that?" |
| 70 | 9-45 | Respondent answered only first page (items 1-8) the other three pages were blank (items 9-45). |
| 81 | | Respondent skipped item 19 and items 28-31 as well as all the demographic data 34-45. |
| 101 | 28 | Respondent wrote: "We have little to no input on choices of student placement." |
| 102 | 8 | Respondent circled both 2 and 4. Researcher entered 3. |
| 102 | 22 | Respondent wrote: "Who's holding the lawmakers accountable?" and underlined satisfy with a ? mark place above. |
| 102 | 28 | Respondent wrote: "Who has a choice?" and underlined avoid having |
| 102 | 29 | Respondent wrote: "no choice who we have" and underlined to avoid having |
| 102 | 30 | Respondent wrote: "once again-no choice by teachers" and underlined avoid having students |
| 102 | 31 | Respondent circled both 2 and 3. Researcher entered 2.5. |
| 110 | 8 | Respondent wrote: "unsure base on norm or their previous scores?" |
| 113 | 32 | Respondent left the item blank and wrote: "don't know". |
| 128 | 5-13 | Respondent circled two numbers for each item and wrote the midpoint number above the circled numbers. These items were entered as the midpoint that the respondent wrote. |
| 130 | 22 | Respondent wrote: "Will the lawmakers have merit pay based on their work?" |
| 144 | 23,24 | Respondent skipped these two consecutive items. |
| 155 | 44,45 | Respondent marked "no" but also wrote: "sometimes mainstreamed in my class." Researcher coded the response as yes. |
| 202 | 44,45 | Respondent wrote: "not ESOL teacher-might have some in general ed class not special needs teacher-might have some in general ed |

| | | |
|---|---|---|
| | | class"<br>Researcher coded the response as yes. |
| 207 | 14 | Respondent marked 6 and wrote: "if they teach well" |
| 230 | 22 | Respondent wrote: "lawmakers are never satisfied they would work themselves out of a job" |
| 234 | 27 | Respondent marked 6 and put a star beside it. |
| 234 | 31 | Respondent marked 6 and wrote "have to teach the test." |
| 236 | 32 | Respondent wrote: "prison costs tax payers too much money" |
| 242 | 45 | Respondent wrote: "I am not in special ed, but I do have a team taught class with a special ed teacher." The researcher marked the response as yes. |
| 244 | 44 | Respondent wrote: "poorly worded question." |
| 252 | 20-32 | Respondent did not answer page three (items 20-32) but did answer page 4. |
| 253 | 22 | Respondent wrote: "nothing will". |
| 254 | 27-30 | Respondent circled 6 for each of these items and drew an arrow as if to extend the scale to 10 and circled the 10. |
| 255 | 44,45 | Respondent replied no and wrote: "we are an inclusion school, but I do not have ESOL or severe special ed students. The researcher coded the response as no. |
| 256 | 27 | Respondent circled 6 and made a star beside it. |
| 294 | 28,29,30 | Respondent skipped three consecutive questions. |
| 300 | 45 | Respondent answered yes and circled it. |
| 308 | 8 | Respondent circled 1 and wrote: "What about special education students?" |
| 315 | 19 | Respondent underlined differentiated and wrote: "How are you differentiating?" |
| 315 | 25 | Respondent underlined differentiated and wrote: "depends on the differentiations." |
| 330 | 22-25 | Respondent did not answer 4 consecutive questions (items 22-25. |
| 345 | 8 | Respondent wrote: "But I am a fine arts teacher! There are no standardized tests in these areas. |
| 349 | 44 | Respondent wrote "not this year." The researcher coded the item no. |
| 351 | 45 | Respondent wrote: "Yes-mixed in w/others no specific class"<br>The researcher coded this yes. |
| 360 | 45 | Respondent wrote: "no (a few)." The researcher coded this yes. |
| 363 | 33-45 | Respondent did not complete the last page which was all the demographic items (33-45). |
| 364 | 27-30 | Respondent circled 6 and placed four exclamation marks beside the 6 (items 27-30). |

| | | |
|---|---|---|
| 374 | 27-45 | Respondent did not complete any item past 26. |
| 389 | 33-45 | Respondent did not complete page 4 which included the demographic data (items 33-45). |
| 427 | 31-32 | Respondent did not complete two consecutive items (31-31). |
| 460 | 4 | Respondent circled 6 and put an exclamation point. |
| 461 | 33-41 | Respondent did not complete items 33-41, the demographic data. Respondent put √ for items 42, 44, and 45 and X for 43. The researcher assumed the √ to mean yes and the X to mean no. |
| 467 | 45 | Respondent wrote: "yes gifted." The researcher coded the response as yes. |
| 490 | 8,9,10,11,23 | Respondent circled both 3 and 4 on 5 items. The researcher coded the responses as 3.5. |
| 491 | 35,36 | Respondent did not complete two consecutive items. |
| 494 | 7 | Respondent circled 6 and marked it out and circled e and wrote: maybe |
| 494 | 32 | Respondent circled 1 and wrote: "seriously?" |
| 495 | 12 | Respondent wrote: "This is primarily affected by intrinsic motivation & parental influence." |
| 495 | 14 | Respondent wrote: 'Yes, Attracts teachers to areas of need.' |
| 498 | 15 | Respondent circled both 3 and 4. The researcher coded the item 3.5. |
| 523 | 5,6,14,15, 16,17,18,19, 31,32 | Respondent circled both 3 and 4. The researcher coded the items 3.5. |
| 526 | All items | This survey has no responses. |
| 528 | 44 | Respondent wrote: 'only in advisement. It's not academic." |
| 535 | 5, 6,7,8,14, 20,21,22,32 | Respondent did not complete 9 items |
| 535 | 15,16,17,18 | Respondent circled both 3 and 4. The researcher coded the items 3.5. |
| 537 | 3 | Respondent circled 4 and wrote: depends |
| 541 | 32 | Respondent circled both 3 and 4. The researcher coded the item 3.5. |
| 543 | 5-15 and 26-32 | Respondent wrote: "N/A I do not feel that these options should affect teacher pay." The researcher coded these items 1. |
| 549 | 8 | Respondent left item blank and wrote: "Are you looking @ % ▲ or simply high scores?" |
| 549 | 9 | Respondent wrote: "see preceding comment" |
| 549 | 14 | Respondent wrote: "depends on if by chance they want these" |
| 549 | 32 | Respondent wrote: "depends on the salary" |

| | | |
|---|---|---|
| 552 | 32 | Respondent wrote: no basis for judgment |
| 561 | 27 | Respondent circled 6 and wrote: depends |
| 561 | 32 | Respondent circled 3 and wrote a question mark. |
| 566 | 24 | Respondent circle 6 and wrote 7,8,9 and circled 9. |
| 566 | 32 | Respondent circle 3 and wrote a question mark. |
| 593 | Section II directions | Respondent underlined "factors other than college degree and years of experience" and wrote: "I am basing my answers on scores (not based on Title I status)." |
| 601 | 20-32 | Respondent did not complete page three (items 20-32). |
| 610 | 34-38 | Respondent wrote: "Not appropriate" for each item. The researcher did not code these items. |
| 611 | 18 | Respondent circled both 1 and 6. The researcher did not code this item. |
| 611 | 34,35,36 | Respondent wrote: "this is not an appropriate question by federal law. This makes this not be anomous." |
| 613 | 27,28,29 | Respondent circled 6 and then wrote 7, 8, 9 and circled 9. |

# APPENDIX P

## RESPONSES TO OPEN ENDED QUESTION 33

Open Ended Question Responses
Final Survey 2
Factors Teachers Find Acceptable For Enhancing Their Pay
Mary Jane MacLeod

Q.33 Do you have additional comments about differentiated teacher pay?

| Respondent number | Response |
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| 8 | How would this affect educators who are not "classroom" teachers? For example, special area teachers, counselors, media specialists, etc. |
| 9 | Consider Special Area classes and how this will affect them<br>Consider # of kids in a classroom |
| 10 | Teachers across the nation should be paid for all of their degrees and years of experience. Some classes may have all average and above average students and another teacher could have below average students. A lot of the times class lists are not balanced! Also a lot of states provide extra supplements for special education teachers. |
| 11 | Differentiated pay is good in theory. My concern is that personality conflicts lower the pay of a good teacher or conversely increase the pay of a less effective teacher. Test scores can be a false interpretation of teaching quality and there are other factors involved. |
| 12 | I can't see how this would not penalize teachers who have low students in their rooms. It would have to be based on growth and students level of functioning. |
| 13 | It would not be in the best interest of our students. |
| 14 | It would be difficult to determine who really deserved the higher pay. It would cause, I believe, far less cooperation and integrity among teachers. |
| 15 | Differentiated pay based on evaluations or student achievement are too subjective. |
| 17 | The distribution of students in our classrooms is not equitable. |
| 19 | Differentiated pay does not take into account circumstances not under the teacher's influence such as attendance of students or the student's learning style or ability. |
| 20 | By what nonsubjective standards would a "better" teacher be judged? |
| 22 | Too many of the possible reasons for receiving extra pay are beyond the teachers' control. Test scores depend on more than teacher ability. |
| 33 | I think it would be good to factor both experience and education level with their performance. |
| 36 | We should not be paid on students' performance. |
| 43 | As long as it does not take money away, it can only serve as an incentive to do better. |
| 44 | I think differentiated pay based on student improvement is a good idea over standardized test scores b/c some classes start with lower scoring students who make big improvements. |

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| 45 | It would "open up a can of worms." |
| 49 | I think the concept is great. We need to look further than attendance (which we have little to no control over) or test scores. We only have control over what happens from 8:30-3:00 in our class-home is such a different issue…for every student. Also teachers have no control over who is in their class-teachers might not teach in lower performing schools. |
| 56 | I disagree with it. |
| 61 | I think school system would get better and more people willing and wanting to be teachers. |
| 62 | It should be based on a case by case basis. Special areas should be rewarded/compensated more (ie increase tuition reimbersment classed held at close locations. |
| 72 | It's too difficult due to the diversity of classes. |
| 80 | It was hard to answer the consequences section because it depended on how pay would be differentiated. |
| 92 | It becomes very challenging to determine who should be paid more and for what. I think that there should be some differentiated pay for being highly qualified in all subject areas. |
| 93 | Suggest you can be rewarded w/ pay. Do NOT take away pay. |
| 98 | It is difficult to determine what is "effective". Special area teachers have no means to determine their accountability if you all use test scores. |
| 99 | It will cause teaching to the test. |
| 102 | All most all teachers I know already work very hard, extend hours with out anything extra. We do it for the children. Any extra would be great for all. There are great teachers all around who all deserve a pay raise. |
| 105 | There isn't any single solution to this proposal scenario. Good Luck! |
| 115 | I think the number of differentiations should be limited to reduce the variety of problems. Many professions get paid based on how well they do, so why shouldn't teachers have the same thing. |
| 116 | I think these should be in the form of bonuses that must be earned each year. |
| 118 | Ultimately it (test scores, student achiev.) comes down to what type of students you get, level of parent support in their home life, & attitude towards school! The most effective, fun, positive, energetic, & caring teachers can not change the above facts, which greatly effect student achievement, performance, and attitude. |
| 120 | Differentiated pay will do irreparable damage to the teaching profession. There are too many factors of which teachers have no control. I believe this policy would lead to "teaching to the test" and further reduce teaching "the whole child." Everyone would welcome higher pay, but not at the expense of our students and our profession! |
| 123 | It could be a good thing. |
| 124 | Differentiated pay is a double edge sword that if left to favorable administrative evaluation, could become biased by personality conflicts and/or affinity, and create resentment. |

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| 126 | It's a great idea but making if work for the benefit of teachers and students will take an act of god |
| 130 | Throw efforts & funds towards attracting strong teachers to title 1 schools! Will Georgia ever get this right?! Provide bonuses for schools/teachers w/difficulties. |
| 135 | Everyone (even the lowest performing student) knows who the best teachers are! Find a way to differentiate pay based on that, not on test scores. |
| 139 | Differentiated pay does not fairly recognize the teachers who work with students who have disabilities. |
| 140 | There is no easy way to solve this issue. |
| 142 | I have taught in a system that had a "master teacher" program which paid higher salaries to those who achieved. I saw no positive effects with this program. Since I was identified as a "master teacher" the first year on, I have no reason to give a negative evaluation other than it really did not impact the students or teachers positively. |
| 143 | Where does special ed students fit in & Ell students? |
| 157 | If this type of organization or program could be operated in a completely fair way, it might promote student growth. The potential for disaster may outweigh the potential for growth. |
| 159 | There are many other factors that would change answers.<br>I like grading teachers, but it needs to be over at least a 3 year period to account for various student ranges. |
| 160 | Assessment is not "clear-cut" in 1 test only. The assessment of an educational system can better measured <u>after</u> students get into the <u>real world.</u> The intangibles do not show up on a test. As a veteran teacher who takes pride in my work I RESENT being evaluated on test performance only. Have the legislators take time out and observe great teaching practices not BUBBLED IN TESTS ONLY! |
| 161 | Love the idea of differentiated pay for most things. However, I worry about dishonest practices when it comes to "teaching for the test" or baseline/post test data. |
| 165 | From my observation, even educators may be dishonest and cheat to make their students "appear" better performers. Merit pay would increase cheating on the teacher's part to an extremely high level. |
| 166 | Teachers will teach only to the test. They may feel motivated to cheat. Students who are special ed or disadvantaged are not distributed evenly or in a fair way. |
| 173 | This should certainly be implemented-pay should be based on quality work performance-not how long you've been at a job or education status. We have many overpaid ineffective teachers that shouldn't earn a higher salary. |
| 178 | Care must be taken to "level out" the beginning/entering student's ability and achievement. Scores must be weighted to account for differences such as sp.ed, ESOL (etc) |
| 181 | Teachers should be rewarded if a student outperforms his ability level. |

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| 182 | Great idea! Non-motivated teachers should consider another profession that will not affect future adults negatively. |
| 183 | Test results should always be compared to ability scores. A teacher should be awarded when a student out performs his/her/ABILITY level. |
| 190 | Test that are administered to determine AYP are English proficient baised Students who are not proficient in English score lower due to language issues. If there scores determine teacher pay-teachers who have a large # of ESOL student are set up to make lower pay. |
| 191 | Teachers will not work with low or disadvantaged children if you go to differentiated pay. Bonuses may be considered, but not a teacher's base pay. |
| 201 | There are many teachers who do so much and go unrecognized. This would satisfy this. I teach sped and put in min. 60-70 hrs. a week individualizing the students work. This should be recognized. The paperwork per student is ridiculous. |
| 203 | I believe there should be a considerable bonus to teachers whose students score above/or exceed expectations on tests. In this way it is non-threatening to anyone. Teachers do work hard to get scores high, however, some teachers get the challenge students over and over. |
| 204 | Differentiated paid would cause competition between teachers. It is not the goal of a teacher to compete with one another but to share ideas, build up and encourage. |
| 206 | I was on a merit pay system in Tn. several years ago. It was called the Tennessee Career Ladder program & it had 3 levels. I had achieved the highest level (Level III). The monetary incentive increased w/how hard I wanted to work, $3,000-7,000 annually. If I tutored during the school year & did summer school, I made the additional $7,000. It was a very intense evaluation but was well worth it to those of us who worked hard at our jobs & loved teaching. I loved the plan & miss the money. |
| 207 | You stated excellent questions. I have always worked hard to be an above average teacher and felt merit pay show be awarded, but you made me stop & think. As important as our job is-molding thinkers of the future. We must do something to motivate below average teachers. |
| 212 | No matter what incentives are used "merit pay" will cause dissention among teachers. No incentive to teach long term or get advanced degrees. |
| 215 | Is there a negative side? A reduction in pay for poor teaching and low scoring evaluations. |
| 219 | I am afraid that differentiated pay, based on the entities you described, would create animosity toward the profession in general. Too many "what if's" build a "cut and paste" classroom/school, which is what we have worked hard to dismantle from previous years. |
| 221 | I think differentiated pay should not be based on student performance. Rather, it should be based upon a teacher's ability to demonstrate effective skills to a non- biased agency. Likewise, differentiated pay should reflect the needs of a school system as well as the SES of a particular school. As student's SES decreases, teacher salaries should increase. |

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| 226 | There are certain elective classes that are important to the total education process that would not be in this category. Ex (marketing, PE/Health/Special Ed, Drafting, web page design) Do doctors, lawyers, ministers get paid more for each successful surgery, case, or saving a sinner? |
| 228 | There are too many question marks when you start talking about pee/parent/student evaluation. Teachers with higher standards might care more about getting those individuals to like them versus quality teaching. Also, student performance on standardized tests has so many other variables than quality teaching. |
| 229 | The teacher has no control over the students they have therefore, holding their pay based upon student achievement is not fair. You can cause several problems within the school if you go to differentiated pay. |
| 230 | 1.Teachers have no control over the following:<br>-preparedness level of students entering their classes<br>-number of ESOL students entering their classes.<br>-number of mainstreamed students entering their classes<br>-the attendance of a student<br>2. I would approve of "Pay for Performance" only if pay was based upon the level of student improvement. However, this also has limitations b/c students working at high levels may not be able to make gains<br>3. I am internally motivated by: love for the subject matter, and love for the students. The "pay for performance" is demoralizing. I strongly feel that this would pit teachers against each other as the AP vs. non-AP teacher caste system is set in motion. |
| 231 | Not fair to teachers of poor, disadvantaged, or sped children. |
| 232 | What would you do w/the teachers who teach electives & do not have county/state mandated test to assess scores with? |
| 233 | I think differentiated pay should also consider the subject you teach. I feel science and math teachers should be paid more due to the difficulty of attracting quality candidates. I also feel science teachers deserve more pay due to the work they put in for labs and if they have a degree in their subject matter. |
| 234 | This places all of the responsibility for student achievement on the teacher. Parental involvement and student's desire to excel (yes, we can affect this but not always) are also huge factors that are ignored in this. If I taught in a private school or taught gifted or honors this would benefit people like me. In this system the "elite" will reap the benefits. |
| 239 | I do NOT think that pay should connect to student performance. You cannot base pay off of performance b/c students have various needs and teacher should feel penalized for his/her student make-up. |
| 242 | Some of these questions have little relevance without a specific plan in place for differentiated pay. For example, would the amount of money allocated for salaries be changed? If the net dollars are unchanged and teachers complete for their slice of the pie, I see negatives outweighing positives. On the other hand, if teachers are given the opportunity to |

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| | increase their salary based on reaching incentives, I see win-win with teachers working towards positive goals while students are taught by more motivated teachers. |
| 243 | I think student improvement is a fair method. As a teacher of special education students, small gains can be successes. |
| 245 | Differentiated pay would be acceptable as long as the criteria are established and clearly disseminated to teaches. I would favor an independent agency conducting evaluations/reviews rather than peers or administrative staff. |
| 246 | We are all individuals with talents and abilities with the same educational goals for our students. Some teachers are involved in many activities outside of the school day that will enhance their individual professional growth and I commend those teachers on their dedication. There ar those teachers that do not attend these meetings but spend extra time on assignments that will better their students. Which teacher is considered better? They are both great teachers. A teacher can present the material in 100 different ways to teach a student to pass a standardized test and if a student makes a decision not to try or do his very best then at that point, it is not the teachers fault and should not be penalized for the students decision. This is the reality of teaching students. In my opinion the good teachers are the ones that help the at risk student develop a sense of positive self-esteem so that they will make decisions that will generalize into other areas of their lives and help them become successful members of society instead of spectators only. You can't put a price on that. |
| 247 | Teachers cannot control who is in their classes.<br>Will lead to "give grades"<br>Will lead to "teaching to the test"<br>Will cause teachers to only focus on material that will show up on standardized test, and not teaching some of the more enjoyable ("fun") subject matter. |
| 248 | It needs to be done, it won't be pretty. |
| 256 | If we move to differentiated pay based on test scores, I will leave the profession. I believe this is completely unwarranted and unfair and my students have not scored low. |
| 258 | I think rewarding good teachers is the real world. It is the only profession I know of that does not reward for effort, productivity, and achievement. Teachers w/phd's & years of exp. are not nec. the best teachers. I should be rewarded for the difference I make in the lives of my students, not their test scores. |
| 259 | I would not have stayed in teaching career if I had taught under the circumstances implied in this survey. |
| 261 | As a special ed para-I would like to get some credit for my 12 years of sub experience. Also someone with a masters in Bible Studies should not earn more. |
| 262 | Effective and efficient would always want to give their students their best. Their main reward is usually the satisfaction they get from seeing their |

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| | students do well or improve |
| 263 | I think it is extremely unfair to even consider paying teachers more who work in high achieveing schools vs. those teachers who work in low achieving schools. Teachers in those schools work far harder than teachers in high achieving schools. |
| 265 | Morale and interest in teaching technical and college prep students will decline. |
| 266 | Science teachers need to be paid more because of all the prep for lab and science fair that other teachers do not have. |
| 267 | I think additional certification & continuous learning beyond the required hours should be rewarded.<br>Pay should not be based on parent & administration evaluation<br>Science teachers & L. A. teachers should be paid more for their additional time spent on labs & writing activities. |
| 268 | It is time for differentiated pay. I teacher AP Physics and have over a 90% pass rate. 11% of the 5's on the AP Physics B exam last year were taught by me. Yet, I look out the window and see a teacher, teaching walking that makes more than I do. I find that frustrating. |
| 269 | Until our profession addresses the glaring disparity in pay, we will <u>never</u> attract the bst and the brightest. We are teachers, not missionaries-and, I resent the patronizing lip-service paid us by state legislators who then quibble over 1% and 2% raises. |
| 270 | I believe differentiated teacher pay is an unreasonable concept in the special needs department and for teachers with ESOL. This will definitely cause a larger shortage of these teachers. |
| 276 | I don't think it will achieve the desired results. There are too many factors that are simply beyond the scope a teacher can control. It suggests that a teacher is only a great teacher when all students are successful. |
| 278 | It is not possible to differentiate what a teacher does in their classroom. This certainly can't be done with a lame standardized test. |
| 296 | We should create a 5 tiered pay system with significantly higher pay at the level 5 than level 1. Placement by levels should be done by the principal. |
| 302 | To attract more qualified teachers you have to start paying teaches more. Coming from the business world I learned that you get what you pay for. |
| 306 | If you base it on student performance –then all teachers will want gifted certification and you will have <u>no</u> special ed teachers. It needs to be based on proven effective teaching practices- you may have some low performing students who rise to occasion but you may have others so burdened by issues in life they just can't focus on school. |
| 307 | Special attention needs to be paid to the special education program. In some cases students who are M/R (IQ below 70) will not achieve at the same level as other students! |
| 310 | Pay should not be based upon student performance as teachers do not have control over the quality of support the child receives at home. Teacher pay should be based upon merit and teaching as measured by administrators and department chairs. |

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| 311 | Find a way to reward dedicated teachers who love teaching all students regardless of pay. |
| 312 | Pay scale shouldn't stop after 20 yrs if you teach for 32 yrs. Unfair!! |
| 315 | How are you differentiating? Not specific enough. |
| 319 | All of the above criteria must be taken into account when deciding on teacher pay. |
| 322 | The form was completed by a special ed teacher |
| 326 | Just pay everyone more money. |
| 327 | Students are not a "product" with standardized needs, that one mold fits all approach. Testing and results is not the only activity that a school is historically designed to teach. Testing is not the end all cure for education. |
| 328 | Pay us more…professionals deserve better. |
| 329 | If salary is based mostly on student performance, parent perception, and peer perception, no one will want to teach ELLs and learning disordered students!! |
| 334 | This year I have a low level 9th grade class. It is hard work! I believe teachers who work with low level students need extra encouragement & praise! Too much attention is given to AP teachers. |
| 337 | Not a good idea! |
| 340 | Keep it as it is. Teacher's have not control over the socio-economic factors brought to the school house. and to have pay based on such factors is travesty. |
| 349 | Differentiated pay has been tried. It causes moral problems and difficulties in collaboration/trust with the administration and misconception/conception of favoritism. |
| 350 | There is too much emphasis already on standardized tests. |
| 351 | Any program that will raise the salaries of teachers as a group is something all of us want. |
| 355 | Teacher pay can be differentiated by academic & non-academic classes rather than student performance. |
| 359 | Differentiated teacher pay will cause effective teachers to leave the profession. |
| 365 | Good for weeding out the bad, but counterproductive for good teachers |
| 376 | No teacher is ever paid enough! |
| 393 | What standardized test will indicate that business ed/computer science teachers are succeeding? Why should math & science teachers be paid more? The curriculum does not change, whereas, my area is constantly changing-new software, new technology, new courses. Differentiated pay is totally unfair across the board-those teachers who can, will teach only to the test to receive higher pay. I will be thrown under the bus. |
| 396 | Teacher pay should be based on degrees, years of experience, and high-level teaching techniques. It should not be based on test scores. Test scores are not necessarily indicative of student learning. |
| 399 | Teacher morale is at an all-time low, and school systems are having trouble both attracting & keeping qualified young teachers-"differentiated pay" would only seriously exacerbate those problems!! I say this in spite of |

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| | being in a very high-performing school-I'm not biased! |
| 404 | In theory I feel that differentiated pay is an excellent idea; however, it would be very difficult to effectively implement. |
| 409 | Awful idea-we teach b/c we love teaching-& we all do what we can to improve |
| 429 | If teachers are paid for student performance, the teachers will be forced to make the classes easier. |
| 434 | It may work better by districts or schools. |
| 437 | How about ineffective teachers be let go after due process… How about??? |
| 438 | Difficult in find arts curriculum |
| 439 | Evaluation should be part of your pay scale, not just degrees & all your committees, etc… Seniority should be awarded-no max out= max should be 30 years not 20 years |
| 442 | Ridiculous. You cannot punish a person who teachers kids that DO NOT WANT TO LEARN! No one will want to teach at risk type kids or any others that are not college bound. |
| 446 | You need to explain what you mean by differentiated! |
| 452 | Good idea-difficult to implement fairly. |
| 462 | NO WAY! |
| 464 | If you want more qualified teachers getting into the profession you have to have competitive pay with business |
| 467 | It really doesn't matter what I think as there is no real force representing teacher pay issues at any level of gov't. |
| 469 | More Pay--- |
| 475 | (a cartoon was drawn) One character said, " Here's your pay check for higher test scores."<br>"Yay, I can eat now!!" was the response of the second character. |
| 476 | Creativity has already been taken out of teaching Differentiated pay will not make a difference. |
| 477 | I don't think test scores should impact a teacher's salary. Extra-curricular involvement other than sports should impact a teacher's pay (academic clubs/teams) |
| 479 | Teacher salaries should be based on experience, level of education and professional improvement. Until class size, student intelligence, motivation and performance are equal teachers can't be evaluated on the same level. Teachers cannot be paid equally based on student achievement or test scores. |
| 482 | Diff. pay should not be based on subject area taught. |
| 484 | Differentiated pay based on student test performance is a thorny issue because many other factors affect it (other than teacher quality). Evaluation based on improvement in pre-test/posttest scores might be ok, but not fair if the teacher was accountable for ESOL or special ed kids, kids who lack basic skills, or are in other ways disadvantaged. Teachers who have earned advanced degrees and certifications have increased their skill set and knowledge base. This equals a high degree of professionalism and |

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| | should be encouraged through higher pay. |
| 485 | Differentiated teaching will lead to issues of teachers padding grades, teaching to the test, etc. teachers who hold students accountable will be penalized for expecting their students to be responsible for their own successes. |
| 486 | The system cannot be solely based on performance w/testing for variety of reasons. One major reason is that if money is involved, some teachers will teach to pass the test not to learn the material |
| 487 | I like the idea of differentiated pay IF the performance of the teacher is evaluated apart from the performance of students. Teachers have little to NO control over the motivations of students, the education & skills a student received prior to his/her class, and the support a student receives at home. All of these factors affect performance on standardized tests & the ability of the teacher to meet benchmark standards, not JUST the teaching skills of the educator. If pay is dependent on scores, good teaching will be no more than teaching to a test. |
| 488 | Crititcal need areas like Science, Math, and special Ed. Should be paid more. |
| 489 | Keep criteria to a minimum-adjustifiable. |
| 490 | I think that you can't hold teachers accountable for every part of their students' performances. Sometimes there are students in my classroom that do not care about learning-no matter what I do. Why should I be punished for working extra hard to engage him/her even though he/she will not put forth any effort therefore perform poorly? That will definitely lead to resentment or leaving the profession. |
| 491 | Teachers with special ed, and low socioeconomic background students in their class should get pay initiatives. |
| 492 | With some of the statements in Section II, it depends on the definition of differentiated pay. If it is all about test score & student performance it will be harmful. If it is about factors teachers can more directly control (ex. professional learning) it would be more positive. |
| 494 | I think that differentiated pay has its perks, but this can be very dangerous. The amount of good quality teachers may increase but the population as a whole will undoubtably decline rapidly. |
| 495 | Many of these questions could be construed in opposite ways.<br>#7 sounds good @ first, but what about impossible-to-please parents?<br>#31-At first I said yes because creative teaching often helps retention, but I am less apt to attempt creative enrichment if "teaching to the test."<br>#32 Differentiated pay would have to be based on much more than test data. Intensive, multistage evaluations, systems of appeals, etc. will be expensive. Class sizes would have to be reduced to allow teachers time for paperwork, portfolio creation, & general hoop-jumping. This adds up to +++$$$! |
| 497 | Special Education teachers pay should not be based on how well their students perform on standardized test but possibly on student/personal achievements made by the individual students. |

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| 503 | Pay based on student performance will not increase student achievement. Pay based on performance will increase teaching to the test and encourage teachers to 'give' students higher grades for the sole purpose of increasing or maintaining their salary. |
| 511 | This would be a very very subjective way to evaluate teachers. Also-some students naturally excel at academics and others do not. If teachers received differentiated pay they would only want to teach the smart students. |
| 518 | Differentiated pay could be in the form of bonuses for achievement @ higher levels schools; making AYP, pretest/posttest improvement, successful class passing rate, etc. |
| 519 | Teachers have no control over students taking a test 1 day-and that score reflect how ell that teacher performs. Some students do not test well, some may have had a bad night before the test, or been absent before the test and missed review. Doctors are not paid by correct diagnosis nor lawyers paid by # of cases won-so why should we be paid by test scores. |
| 520 | Differentiated Pay should not be based on student achievement because this will lead to resentment toward lower-performing students and make it even more difficult to staff low-performing schools. |
| 521 | Differentiated pay would not help educators become better teachers and wouldn't make students learn more. It would destroy morale since working with struggling students is very difficult and especiallywshen the don't show progress on particular measurements. Already there is dissatisfaction between content area teachers who give essays and other time-consuming-to-grade work & PE teachers who have virtually no paperwork. |
| 524 | I would support a differentiated pay scale based on subjective criteria, but one on objective criteria. |
| 527 | I have been in this profession since the 1970's. The sad thing is that teachers are all still receiving the same pay for the number of years of experience and for the same degree. It is sad that there are so many good, hard-working teachers who leave the profession as frustrated individuals because they need to make more money. It is also extremely frustrating to work beside teachers who do very little to receive the pay you do when you work so hard! It is not good for morale! We are professionals and should be paid as such. |
| 528 | I think differentiated pay should be based on following:<br>Years of education/degrees<br>Year teaching<br>Evaluation by administrator (done so often) |
| 529 | Did not know if this survey was only geared to k-12 educators. I also teach at the University level and this ame discussion is taking place—There was no envelope w/the survey?? |
| 531 | Just pay teachers more they are worth it |
| 537 | All good points but the bottom line is always how is "good" teaching determined-who decides, by what method. Just about all points could have |

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| | been rated agree or disagree, with arguments both ways. |
| 539 | Differentiated pay should be based on pretest/posttest and administrator evaluation. It may be hard (financially) for schools to have a lot of good teachers. Teaching at a low performing school should have better paid staff since it is much more challenging. |
| 540 | We have very little control on the ability levels of students. Focus needs to be on parenting NOT teaching. |
| 548 | What about special education teachers? Their students do not perform well on district & stae tests. Will these teachers receive low pay? |
| 549 | Questions were often vague & did not allow for multiple perceptions of how the questions could be asking. |
| 550 | This kind of pay will cause corruption in the school system. Peers and administrators do NOT need the power to influence teacher salaries. Differentiated pay will cause excellent teachers to leave the profession. |
| 551 | As a special ed teacher I think that having a teacher's pay based on test score is absolutely ridiculous. Although it might be an incentive for some-it is taking all the responsibility away from the student. |
| 553 | Differentiated teacher pay will cause an exodus of teachers in science and math, as these are areas of poor performance on standardized exams. |
| 554 | In an ideal society differentiated pay would an obvious choice, but one must realize that sometimes teachers do not have the luxury of choosing their students. Education does not focus on creating "products"—we deal with real lives, and often times those lives (students) do not come from ideal family situations. What would happen to those who are assigned a classroom full of less than stellar students. |
| 555 | Teachers worry admins will give pay increases to their coaching buddies. I think if there is a system of checks & balances it would work well-if-the pay was based on teacher effort/ability/creative lessons/ability to earn grant $. Pay for student performance would not be fair teachers would resent special needs students and ESOL. Teachers would "dumb down" exams, etc. |
| 556 | I think teachers that spend more of their personal time at school helping students, specifically fine arts teachers who run numerous rehearsals, should either get paid more altogether or get paid a healthy stipend. Most fine arts teacher don't leave until after 4 pm, if not closer to 6 or 7 pm. Currently only coaches get stipends, and only band is considered a GHSA sanctioned coach and gets a stipend, that is unfair to other fine arts teachers. |
| 558 | Perhaps a rubric would be helpful to determine the salary bracket. The same way students learn differently, teachers have varied skills and experience upon entering the classroom. The sate does no always take that under consideration.-so should where advanced degree work occurs. |
| 560 | Differentiated pay is a good idea in theory. I believe all strong teachers would welcome the chance to make more money based on our merits. However, the means of evaluation are too subjective and biased to be fair. |
| 561 | Improvement should be the most important factor! Even a small one. |

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| 567 | In an "ideal" school, I agree that better teachers should be rewarded. However, I don't believe there is an unbiased way for peers or administrators to evaluate teacher performance. To truly be effective, evaluation would have to be conducted by professionals who do not personally know the teacher being evaluated. The cost of creating such a beauracry (sp?) would be too burdensome on taxpayers and would dilute the funds that could be used more directly with students. |
| 569 | Question wording could cause confusion-ie #1-Teachers should be paid more if they earned advanced college degrees-but less (than their current pay) if they have not? This applies to many questions. |
| 570 | Candidates should be given additional pay when one has educational experiences from other areas in education. |
| 571 | If we work hard & students do well on Gateways and CRCT, we should be rewarded. The same goes for staying in an NI school with disadvantaged kids. |
| 577 | #5,6,7 Favorites may play a part<br>#8-11 If testing/teachers are closely monitored with no misconduct<br>#18 Hopefully!<br>#24 Hopefully not because your a team. |
| 578 | Differentiated pay can increase teacher accountability for their own performance. The accountability of students and progress of lower level students is dependent upon the attitude and motivation of the student. Teachers can improve performance, but it changes each year with a new group of students. The quality of the teacher did not change, just the group of students. |
| 581 | I think you are asking for trouble |
| 582 | How do we hold students and parents accountable? (especially parents) Also, how do we hold students' previous grade teachers accountable for things on which the current grade level is assessed. |
| 584 | I work at a Title 1 school and I work so hard to try to help kids success. Many students have the attitude that they just don't care. I have worked at affluent schools also. It is no work, or little work, to ensure that those students pass state tests. Therefore, I think teachers would be unmotivated to take on a challenge to raise test scores in failing schools when they could just work in an achieving school & get paid for performance with much less work. Teachers should be rewarded for helping students in Title I and failing schools become successful. As it is now, most great teachers do not choose to work in failing schools. |
| 590 | -Teachers will want to leave NI schools and will want to work at high-performing schools.<br>-Where is the accountability for parents? NI schools typically have little parent involvement in their children's education.<br>-Schools should be able to get rid of discipline problem students much quicker because they distract the learning environment. |
| 593 | I am answering Section III based on teacher pay differentiated due to test scores. I feel that differentiated pay based on the school's Title I status |

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| | would be beneficial for students and teachers as it would give schools a wider range of high-quality teachers to choose from. The daily challenges that come with a Title I school's student body would, perhaps, balance out with more compensation. |
| 595 | It is a bad idea. It will lead to a mass exodus from schools with high numbers of ESOL and economically disadvantaged students. |
| 598 | Teachers should have the opportunity to be paid like professionals in other careers. Our jobs are important and I believe this will bring future leaders to our profession. I also believe that this will attract great teachers to our school. |
| 605 | The primary issue with differentiated pay is that the evaluators are not really objective and are definitely not competent in the management processes required for continuous improvement of the teaching professional. |
| 613 | I think teachers who go the extra should be paid accordingly, but differentiated pay will take away the state's goal and efforts to attract quality teachers to special education. The U. S. Dept of Ed has already stiffed special education teachers with promised tuition reimbursements. Teachers understood that other factors affects student scores than teaching and we should not be held accountable for factors beyond school's control. |