Analysis of Merit pay for teachers' performance

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Abstract

The purpose of this paper is to analyze whether or not the merit pay system for teachers'

performance should be utilized as a form of evaluation and to determine students' achievement.

In addition, this paper will also discuss the view of the media on merit pay and the research data

that has been conducted to determine its effectiveness. Today, merit pay is a topic of interest for

the media. According to *Prospect*, "Merit pay is hot" and the overall consensus of struggling

districts is if they pay more, the best teachers will be willing to work for them. U.S secretary of

education Arne Duncan supports the linkage of teachers pay to their students' performance.

However, recent studies have shown that merit pay for teachers may not work or doesn't change

either the teachers' practices or student scores. Moreover, research shows no evidence; its

effective in increasing students' achievement.

Introduction

Originally, merit pay was created in England in 1710, and teachers' salaries were based

on students' test scores in reading, math, and writing. As a result, teachers and administrators

were concerned about financial rewards, and punishments. So "curriculum became narrow to

include only the testable basics. So drawing, music, and science disappeared. Teaching became

more mechanical as teachers found drill, rote repetition produced the "best" result." (The Boston

globe, 2005) Eventually, teachers and administrators attempted to distort students' outcomes and

the plan was dropped.

Throughout the media data, I have examined advantages and disadvantages about merit pay plan for teachers' performance. The media went into a frenzy that policymaker favors merit pay system for teachers' performance as well as the quality of public schooling. According to Arne Duncan, merit pay based on students' performance is more effective in evaluating teachers, because evaluations will be able to determine which teachers are effective in terms of performance based on students' achievement rate. In addition, merit pay would increase the quality of education in public schools because merit pay would serve as an incentive for teachers to perform better, which would result in better students' outcome. (*U.S. report and World news*, 2010) In an effort to improve the quality of teachers' performance, New Jersey Education Association (NJEA) is also willing to revamp N.J. teacher evaluations based on students' performance. Therefore, better teachers are able to have their pay increased through the merit pay system.

However, The Washington Teachers' Union feels that evaluating teachers based on students' performance is unfair and that the problem of implementing merit pay is that teachers cannot be assigned students that are equal in all respects. (*The Washington Times*, 2007)

Most recent studies also show the challenges of merit pay plan. Most researchers said that it was hard to evaluate teachers' performance based on students' achievement. Because they found it was not fair and unintended system to evaluate teachers and give financial rewards. Most teachers' evaluation was done by principal so the principal might not like them because of individual's preference. Therefore, it is difficult to evaluate teachers' performance in an objective way. (*The Newsweek* 1983)

Recently, merit pay has been a controversial topic in education policy on the media.

Policymakers and educational experts attempt to find a better way to implement merit pay system to evaluate teachers' performance on students' achievement. However, merit pay plan was not successfully done in a positive way, even in history, since it led to more on test preparation in limited subject areas than other subject areas. Therefore, I would like to analyze whether or not merit pay plan should be utilized as a form of evaluation and to determine students' outcome.

Literature Review

This section is about showing the analysis of merit pay for teachers' performance on students' achievement based on the research data. Most cases show that researchers have implemented whether merit pay scheme can be utilized as teachers' evaluation successfully or not on their studies. Moreover, it has been shown how the results are mixed from the research data.

The American education system has been involved in highly localized system in which each state, city, and town has completely control over the curriculum for children's learning. Nowadays, people see that the best way to reform with urban public schools are to change the system in which teachers are paid. (*Prospect*, 2009) Researchers have shown teacher performance incentive positively influences student achievement based on a case study on the merit pay system. However, there is little evidence to support teacher performance incentives. According to *Prospect*, 2009, urban schools are among the lowest performing schools within the educational system. As a result, reformers have tried to implement incentives system.

Here is a case study. Elberts, Hollenbeck, and Stone (2002) reported the implementation of this incentives system was conducted comparing one high school that utilized the merit pay system to another high school that used the traditional compensation system in 1994-1995

through 1998-1999 for a five-year period. They analyzed students' outcomes including course completion, class attendance, grade point average, and pass-rate condition on a course completion. Both schools are in the same county but in the different district. Both schools are also similar to course offerings, students' economic status, and funding levels. As a result of Course Completion percentages between both schools, teachers in school A (merit pay) was rewarded more than teachers in school B (traditional pay) because students were still enrolled at the end of the course. However, Daily class attendance rate didn't show merit pay system seemed to have no effect in school A. Because the percentage rate was stayed as is in the two analysis years. The data of GPA and pass-rate on their courses in school A (merit pay) shows the decline percentage more than school B (traditional pay) because school A has more low-performing students with high retention rate than school B. Although this case study was somehow successful in terms of course completion, there was no clear evidence about course content for this method. Therefore, it was still questionable whether merit pay system for teachers' performance works or not and to determine its effectiveness on students' outcome.

Compared to *Using performance based pay to improve the quality of teachers* (2007), Lavy mentioned that the substantial quality of improving public education can be leading to effective teachers based on merit pay plan. He examined merit pay which called "individual incentives based on student performance." (Lavy 2007) He suggests general guidelines for designing effective program for performance-based pay.

First, he emphasize the system should measure true performance that minimizes random variation through unintended results. He shows that the potential benefits of performance-based pay that could improve schooling productively. Moreover, it could improve efficiency by correcting distortions between teachers' preferences and those students. In addition, he suggests

that performance-based pay can make compensation systems more equitable, and may increase supporting for public education from policymakers. However, it was based on theoretical approaches to examine the study; there were more potential challenges to performance-based pay.

One of the most challenges of performance-based pay will be a fair evaluation toward students' achievement. Lavy (2007) mentioned that merit pay can undermine the collegiality, cooperation, and collaboration among teachers. Furthermore, he stresses that "there could be unintended outcomes that teachers might focus on the easiest way to increase the rewarded measure or connecting compensation to test scores might cause them to be favor of teaching in reading and math subjects." (*Using performance based pay to improve the quality of teachers*, the future of Children, Spring, 2007, Pg. 87-88)

He also addresses that other challenges like high compensation could raise the cost of education, teachers won't respond to financial incentives, teacher unions aggressively oppose performance-based pay, and the high cost of performance-based pay plan.

There is another case study from Dee and Key's article *Does Merit pay reward good teachers*" *Evidence from a Randomized Experiment* (Journal of Policy Analysis and management Summer, 2004) that whether nor not merit pay system for teachers' performance utilize as a form of evaluation effectively and to determine students' achievement. The results of students' achievement were mixed from their studies. It shows that a new evidence of Tennessee's career ladder evaluation system could be evaluated effectively in rewarding teachers who increased student performance. It proved that mathematics scores were increased by 3 percent but it didn't promote reading achievement.

Furthermore, there was also data called project Student Teacher Achievement Ratio (STAR) which was well-known class-size experiment with 6325 kindergarten students from 79

participating schools were randomly assigned for 4 years. The result of this career-ladder system was at least successful at rewarding teachers who improve students' outcome. Particularly, there was statistically significant increase in mathematics scores, except reading skills.

Overall, it appears to me that the Tennessee's program shows the possibility of teachers' performance on merit pay plan if there is a well-designed evaluation system. However, it is still unanswerable question whether merit pay works in effect accurately or not. Because it is still unsure that rewarding based on teachers' performance-quality was evaluated in fairness and equitable manner. (*Does Merit pay reward good teachers? Evidence from a Randomized experiment*, 2004)

There is new evidence that shows reducing class size and increasing teachers' salaries by performance-based pay. It says that merit pay system provides possible benefits of improving students' achievement. In Dee's *Teachers*, *Race*, and student Achievement in a Randomized experiment (2004), he addressed that Krueger (*The Effect of attending a small class in the early grades on College-test taking and Middle school test results*: Evidence from Project STAR, 1999) presented the examination of the test score data from Tennessee's Project STAR class-size experiment. It randomly matched students and teachers within participating schools.

The idea of this experiment was the random implementation of both students and teachers to assign in three categories; small classes, regular sized classes, and regular classes with teacher guides in each school. This study shows test score evaluations are based upon Project STAR Public Access data. There is the teachers' information under this data. It includes race, years of experience, education, and merit pay status. Moreover, the Project STAR class-size experiment on students' achievement especially in math, and reading scores shows unique and conclusive ways to study the educational benefits of own race teachers that generate random

groups of students and teachers. The research data shows the white females' percentage in merit pay program provides 5 percent level significantly higher scores in students' reading scores. However, this study shows its little effectiveness on students' outcome, because there is no evidence for measurement that own race-teachers' performance influences on students' achievement.

When it comes to merit pay for teachers' performance, both teachers and administrators are seeking for a better, fairer, and more reasonable, accurate way to evaluate teachers' performance. (Newton, 1980) On the administrative decision-making's side, there should be unfavorable personnel decisions to evaluate teachers. They should create the needs to carry out articulated standardized evaluation. According to *Teacher evaluation: Focus on Outcomes* (1980), Newton addresses that the possibility of administrative discretion should be maintained.

Newton noted that the merit pay for teachers' performance system, in a way, needs to define with concrete levels of evaluation system: it allows not only accurate evaluation but also boost teachers' improved performance. Thus, teacher evaluation and development based on merit pay for performance-based pay should consider a more equitable and productive way to teacher evaluation and generate important improvement on students' achievement as well. He also addressed that the idea of outcomes based pay based on teachers' evaluation system provides many advantages, especially; clarity and potential for teachers to motivate their higher performance, so that it will encourage students' achievement. As the summary of the merit pay research, I mostly found that merit pay plans have failed because they didn't stress precisely and objectively the outcomes which people expected, they don't carry out the reward in a short time after the performance. Moreover, merit pay plans are not definite enough to ensure the teachers' performance that will be clear enough to the principal to evaluate the reward thoroughly.

The next section will be the analysis of teachers' performance based on merit pay system from the media data. It will display how the media discuss whether or not merit pay system should be utilized as a form of teachers' evaluation. Moreover, it will show how the merit pay plan determines to affect students' achievement.

Data and Methods

I have researched merit pay issue on education policy change through newspapers, magazines, and internet sources. I have collected approximately 20 articles from my media research. Most media sources are from the early 2000s through 2010. I have attempted to search for debate and discussion on the merit pay plan for teachers' performance between policymakers and the public through media sources. Most media data have been described whether or not the merit pay for teachers' performance should be utilized as teachers' evaluation and how it affects on students' achievement.

I have selected the New York Times, the Washington Post, Newsweek, Teacher magazine, the New Yorker, U.S. News & Report, Star-ledger, the Record(Bergen County, NJ) data bases, from Newspapers and Magazines sources, and Prospect.org, the Boston globe data bases from the internet sources. Using these data bases, I have identified around 20 articles that used the key terms performance-based pay, merit pay for teachers' performance system on students' achievement from my media research. Then I have selected to analyze the data using the following steps.

First of all, *The New York Times* described teachers' merit pay has become an issue recently, and portrayed how teachers' merit pay tied to public education goals in terms of students' achievement particularly, urban school areas. For instance, Gov. Mitt Romney of Massachusetts also proposed in 2005 that more hiring new science and math teachers and giving

laptops to students, and merit pay in his state should tie to classroom performance that could add \$5000 or more to a teacher's annual salary. He would like to improve public education in Massachusetts. He quoted "The ability to close the achievement gap is the civil rights issue of our generation." (*The New York Times*, 2005, Pg.12) The most important thing is that the part of raising teachers' salaries through merit pay is a significant movement around the States to change from a salary structure based on the year of service and teachers' academic degrees. A lot of experts said his approach to improving performance-based pay by merit pay seemed better to fit a private school system than public school. Critics object to his merit pay system as well.

However, in *Teacher Magazine*, the media presents that there are Arizona, Florida, Iowa, New Mexico, and North Carolina which give teachers extra pay for classroom performance. (*Teacher Magazine*, 2005) There is also a merit pay program for teacher compensation in North Carolina. They score on standardized exams in five core subjects with writing and math test and then created the index that they keep track of the percentage of students who perform at certain grade level so that they are able to compare the scores on student percentage with previous years. Minnesota was also pursuing an effort that they imposed merit pay plan as career advancement, professional development, and extra pay up to \$2,000 a year to linking to student achievement in 2005.

Likewise, Seashore Louis, Febey, and Schroeder from "State-Mandated Accountability in High Schools: Teachers' Interpretations of a New Era" examined teachers' responses to this incentive scheme in three states as well: North Carolina, Minnesota, and Iowa. They illustrated these states have different histories and legislation in terms of state standards, "all had a system that compared student achievement results among schools." (*State-Mandate Accountability in High Schools: Teachers' Interpretations of a New Era*, Educational Evaluation and Policy

Analysis, 2005, Pg .177-178)

In terms of the aim of the incentive system on teachers' performance, New York City is growing a number of school systems that have been implemented with merit pay to improve student performance. (*The New York Times*, 2007) Mr. Giuliani has advocated merit pay for teachers and administrators for a long time, but the teachers union has resisted his proposal, because they thought school administrators might reward bonuses for favoritism instead of endeavourers. Assemblyman Steven Sanders predicted that the union would accept a merit pay program since it meant seriously additional dollars.

In the Washington Post, DC schools officials announced also the performance-based pay for teachers' quality in order to increase students' achievement for making the country's best-paid public schools in 2010. (The Washington Post, 2010) DC schools officials ranked highly effective teachers for \$25,000 in one-time bonuses based upon students' performance and other factors, and if those ranked highly effective teachers for two years in a row, then their pay salaries would raise up to\$26,000 a year. "Sixteen percent of the city's teachers were ranked highly effective last school year". (The Washington Post, 2010, Pg.C03) Particularly, Students in grades four through eight take the standardized exams in math and reading, and improved scores, then teachers can earn up to \$10,000 more in D.C. Schools. Even in Maryland, Gov. Martin O'Malley proposed policies for teachers to qualify for performance-based pay and tried to open the door to use of test scores to evaluate them, however, many teachers overlook those policies with skepticism. "If the state wins federal funding, O'Malley also proposes expenses for high-performing teachers and principals who choose to work at struggling schools in poor neighborhoods." (The Washington Post, 2010, Pg. B01)

A Newsweek poll which was about public education's issue showed that a large number

of Americans were in favor of merit pay for teachers and almost half of Americans would pay higher taxes to support public education in 1983. There is a successful case in Seiling, Oklahoma, where the school district for the past four years had contributed bonuses up to \$1,000 to teachers, and their rewards were based upon student performance. Even in *the U.S. News & World Report's report*, schools chancellor's Michelle Rhee in District of Columbia was pushing an effort to teachers' performance pay to student achievement; however, teachers unions irked by her actions." From the union's perspective, there is no fair way to evaluate teachers based on student performance, and it would never place tenure in jeopardy." (*The U.S. News & World Report*, 2010, Pg.38) Gov. Christie in New Jersey was also pushing teachers' merit pay plan for a part of New Jersey's public education system.

Analysis

Throughout the debate and discussion on merit pay plan for teachers' performance in the media data, I have found policymakers are in favor of merit pay system in education policy change, whereas the public are mixed about this issue. Mostly teacher unions oppose to this merit pay system for teachers' performance on students' achievement. From my research, I have also found that based teachers' salaries are low pay, compared to other professional fields. It appears to me that policymakers have attempted to change public educational policy for teachers' performance based on merit pay plan, because of teachers' low salaries situation. Moreover, the public schools are underperforming so policymakers would like to improve teachers' quality as well as students' outcome based on test scores. I would like to analyze in details how performance-based pay affects students' achievement, also analyze how it affects teacher quality and student achievement depending on urban and suburban districts schools. Moreover, I would like to mention School-based performance vs. Individual-based performance in terms of merit

pay system as well.

From *the New York Times*, there was a section that Sara Seiden from Forest Hills,

Queens mentioned on editorial desk saying "the teacher shortage is low pay. Until teachers are
paid salaries commensurate with their level of education, professional dedication and the hard
work that is required of them, there will continue to be recruitment problems and large turnovers.

Recruitment bonuses are not a substitute for adequate salaries." (*The New York Times*, 2007, Pg.
20) To support this data, I found that "Pay, working conditions, and teacher quality" from Eric A.

Hanushek and Steven G. Rivkin used data from Texas public schools, examined how teachers'
salaries and student characteristics change when teachers move and also whether turnover affects
teacher quality and student achievement depending on working conditions' differences in urban
and suburban districts schools.

Men by experience	Women by experience			
Teacher salary and Student characteristics	0-2years	3-5years	0-2years	3-5years
Base year salary	1.2%(0.003)	0.7%(0.003)	0.7%(0.001)	-0.1%(0.001)
Student test score	0.05(0.008)	0.05(0.011)	0.08(0.004)	0.08(0.006)
Percent Hispanic	-4.8(0.06%)	-3.4(1.0%)	-4.8(0.3%)	-4.6(0.5%)
Percent black	-0.7(0.4%)	-0.9(0.5%)	-2.6(0.2%)	-2.5(0.3%)
Percent subsidized lunch	-4.7(0.6%)	-3.8(0.9%)	-7.0(0.3%)	-5.8(0.4%)

Source: Average test score is the district average of mathematics and reading score on Texas

Assessment of Academic skills exams, normalized to mean0 and standard deviation1

The following table shows the estimate of mean differences in teacher quality, by transition status.

Transition Status	All nonmovers in district	Nonmovers within school			
		and year			
Change campus	-0.089(3.96)	-0.054(2.59)			
Change district	-0.011(0.36)	-0.023(0.78)			
Exit public schools	-0.044	-0.072(3.53)			
Source: Eric A. Hanushek and others, "The Market for Teacher Quality." Working paper					
11154(Cambridge, Mss: National Bureau of economic research, 2005)					

As you have seen these tables, the authors found that little or no evidence of a systematic relationship between teachers' value to student achievement. Moreover, they mentioned "teachers who exit public schools are significantly less effective than those who stay, and teachers who switch campuses within the same district are also significantly less effective." Therefore, in this table, "the teachers who stay are not lower in quality than those who leave." (*Pay, Working Condition and Teacher Quality*, 2007, Pg.78)

As a result, they addressed researchers nowadays haven't found most performance-based pay plans effective although there were numerous experiments have been limited in the class size and character of their incentive plan. In *The Washington Times*, some public are questioning how merit pay will be determined to students' achievement and who will make the final determination. (*The Washington Times*, 2007) There is high school teacher on the editorial desk saying that the difficult problem in merit pay system is that teachers are not able to be assigned students who are equal in all respects. "Because each student is different, judging teachers based on how their students perform on a particular test has some problems." (*The Washington Times*, 2007)

Policymakers, administrators, and educators have been discussing how our education system might be improved, and many people have proposed the remedies which focus on

incentive system for teachers' performance, even in institutions of higher education. From *Rewarding teacher excellence* by Griffith and Neugarten, the authors explored two issues of employers' motivation and the role of money on incentive system. They illustrated a number of conditions should be existed before pay-for-performance plan can be implemented. They indicated research from Hammond and Goldman, 1961; Burstein, 1969; Myers, 1972; Levanthal, 1976; Lawler, 1971. "i) Employees must believe that good performance will lead to high pay; ii) they must be able to minimize the negative consequences of performing well (e.g., ostracism by colleagues); iii) they must perceive positive rewards for high performance in addition to pay; and iv) they must enjoy some control over the criteria used to evaluate their performance."

(*Rewarding Teacher Excellence: Organizational Issues and Obstacles*, Teaching Sociology, 1984, Pg.73-74)

They emphasized merit pay schemes should be associated with an employee's performance and not controlled by other factors that limit their ability to execute their performances at a certain level. The authors described "If they work to meet their individual goals, they may suffer ostracism or criticism by their peers."-Faculty members may well become competitive and jeopardize colleagial relationship."(*Rewarding Teacher Excellence: Organizational Issues and Obstacles*, Teaching Sociology, Oc.1984, Pg.79) The authors examined implementing merit pay for teachers' performance may be premature; moreover, it was relevant to "Most pay for performance efforts are in their infancy" in *Teacher Magazine*. (*Teacher Magazine*, 2005, Pg. 22)

I have already mentioned that merit pay plan would be better to fit in a private school system from the aforementioned. To support this detail information, I would like to show an example from *Teachers' Attitudes toward Merit Pay: Examining Conventional Wisdom* by Ballou

and Podgursky (Industrial and Labor Review, 1993)

Description	(1)	(2)	(3)	(4)
	Public	Catholic	Other Religious	Private Non-Religious
*Percent of Teacher	90.6	4.8	2.8	1.9
*Teacher Covered by	12.4	6.2	15.9	25.0
Merit pay plan				
*Teacher received	2.5	2.0	3.2	11.3
Merit pay for				
Individual Performance				

^{*}Full-time teachers.

From this table's result, Private school teachers are favored of merit pay more than do public school teachers and this examination of data is from the 1987-88 Schools and Staffing Survey Challenges. The authors found that "Merit pay was especially prevalent in non-religious private schools and in particular, private sector employees have a more favorable perception of the instrumentality (roughly, accuracy and fairness) of merit pay in their workplaces than do public sector employees (Heneman1990)." (*Teachers' Attitude toward Merit Pay: Examining Conventional Wisdom*, Industrial and Labor Relations Review, 1993, Pg.54-56) There is relevance from *The New York Times*. (Oct 4, 2005 Tuesday) Policymakers, Mr. Antonioni and Ms. Haddad generally mentioned Mr. Romney's (Governor from Massachusetts) proposal of merit pays for teachers' performance appeared to be better fitted to private schools. However, there was little evidence to support that private schools were in favored of merit pay system more than do public school teachers from the media research.

I would also like to discuss whether school performance rewards are benefits our schools and students, how Cooperative Incentive Plan (CPI) contextualize to compare models and analyze their impacts on student learning and school practices. Regarding "Cooperative performance incentive plans", the author showed that "CPI plans differ from individual performance or merit pay in that all teachers in the school receive the bonus based on meeting an objective predefined goal." (*Cooperative performance incentive plans*, Peabody journal of education: An international perspective, 2000, Pg. 142-158) This CPI plan encourages teachers to work together and focus on specific outcomes but avoiding the divisiveness of individual merit pay. The purpose of this CPI is for cooperating with teachers, and all school staffs for an entire school to raise students' performance. The author addressed that "The coupling of school assessment with school-based performance awards appears to offer the promise of transforming the school culture to raise student and teacher productivity." (*Cooperative performance incentive plans*, Peabody Journal of Education: An international perspective 2000. Pg. 144) There are two examples of CPI plan that I would like to state. (Texas, North Carolina)

"Eight years of annual assessment and school-based rewards and sanctions in Texas and North Carolina have produced steadily rising achievement gains. In 1994, hardly half of Texas students passed the TAAS math exam and the number of Black and Hispanic children who passed the test doubled to 64% and 72%. North Carolina students on average score 8-9 percentile points higher on math and reading than their counterparts in 1992-1993. This progress is corroborated by student gains well above the national average on the National Assessments of Educational Progress (NAEP)."

(*Cooperative performance inventive plans*, Peabody journal of education: An international perspective, 2000, Pg. 152) Basically, they usually require 3 to 5 years to completely implement,

and they both Texas and North Carolina's CPI plans were in the same goals that they were pursuing to raise students' achievement as well as academic success from students of all races, especially minority students. However, there are several obstacles that the author noted. First, it would take time to build up "the new skills, roles, and attitudes required to internalize the cycle of continuous school improvement." (Cooperative performance incentive plans, Peabody journal of Education: An international perspective 2000, Pg. 156) Second, the Teacher Federation Policy also opposed the method of standardized tests for evaluating individual student, teacher.

Compared to "Superintendent Terry Grier's Mission Possible Program" (*Teacher Magazine*, Dec 1, 2006, Pg15) in Guilford County: North Carolina from Teacher Magazine (December 1, 2006) the state implemented merit pay program in order to retain good teacher with subject areas. Supposed, they selected nine high-risk elementary schools at grade K-2 for teaching and teachers could receive \$2,500 retention bonuses each year and additional bonuses if they produced good result on state achievement tests, furthermore; teachers could have a class size of 15 students. In addition, there was also Newsweek report (June 27, 1983) that "Second Mile Plan" (*Newsweek*, June 27, 1983 Pg. 61) from Houston, Texas, which was the merit pay scheme, showed teachers could make more than \$1,000 each year, based upon students' attendance rate and the test scores in the entire school. However, NEA and AFT opposed those plans; even some teachers opposed those incentive schemes because money was insufficient for incentive plan and the criteria for evaluation should be more in fairness-manner.

Conclusion

Merit pay system has been implemented in many different states and has hardly been shown to work successfully. Media have been presented public education's pivotal points where policymakers should consider for educational reforms; however, it appears to me the national

politicians' debate between Republicans and Democrats so that neither party has ever come up with specific details of how they achieve quality education with teachers' merit pay plan. Throughout my readings from all varied experts' research articles, most of case studies have been shown long term plans at least 3-5 years to complete implementations in school settings, in terms of merit pay plan for teachers' quality performance based on students' achievement. Most research articles were focused on how to qualify teachers and improve student outcomes based on experts' thoroughly research by implementations. Occasionally, articles that showed theoretical approach were inconclusive and ambiguous results from their own findings even though they were spending certain amount of years and time to implement merit pay plans. My research of merit pay for teachers' performance with analyzing data bases helped me to realize understanding of an issue on my topic and how to re-evaluate the actual problems on organizational structures, students in different demographic areas, teachers' labor market circumstances with working conditions, own race teachers' performance and teachers' credential in schools, even teachers unions as well. I have noticed the unequal distribution of effective teachers might be the most problem that America is facing with. Furthermore, policymakers have attempted different approaches to entice highly qualified teachers; however, there are still so many puzzles and unanswered questions such as what type of merit pay makes more sense to teachers, what teachers' motivation affects to students' achievement, and what conclusive evaluation should apply to teachers' performance. Moreover, a lot of schools are tying student test scores to teacher evaluations is the best way to measure teacher effectiveness, however, there are too many different factors from home environment to health to nutrition to other teachers and school employees to variations in how students learn and perform on tests, and what scores students achieve after then. Eventually, teachers might be forced to teach the test, inhibited real

learning of the world in schools. It might be the reason that the public doesn't like teachers and school employees.

From my own point of view, paying large amount of money to teachers will not help children for our education. To find a way to have successful schools from merit pay plans, policymakers, educators, educational experts should consider what challenges other countries face, compare to them and try to create better merit pay system in an innovative way. As a result of researching merit pay for teachers' performance, I found we needed to build up our own philosophical value and plant our knowledge to students, not just skills for math and reading on test scores, but what kind of teaching that fosters students have critical thinking habits and enhance students' intellectual integrity to the near future.

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