

# Merit Pay: A Discussion of the Issues

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## ABSTRACT

*Merit pay is a timely education policy issue being discussed by educators and legislators and in schools and statehouses across the country. Merit pay is a broad term used to describe a variety of incentive-based K-12 educator compensation plans. Given that the opposing sides of this controversial issue passionately argue its validity as a policy solution, how can policymakers decide whether to endorse such plans, and what does the research suggest are the features of effective plans? In an effort to educate policymakers about the issue in general and to assist interested parties in evaluating proposed merit pay programs, the OEP presents background of merit pay programs, the arguments of advocates and opponents, an overview of merit pay plans in the US and in Arkansas, a summary of relevant research, and finally recommendations for identifying or designing the quality plans.*

## INTRODUCTION

In part because of the *Lake View* decision, Arkansas educational leaders have been occupied with designing an adequate and equitable education system for the state's 465,000 students. Varied attempts to address concerns about public education in Arkansas have included improving school facilities, increasing school funding broadly, lowering class sizes, and setting higher standards. Another avenue for approaching the improvement of public education in the state is to focus on teachers, and research suggests that improving the quality of teachers can indeed make a difference for student achievement (Goldhaber, 2002; Goldhaber & Brewer, 2000; Rivkin, Hanushek, & Kain, 2005; Sanders, Saxton, & Horn, 1997). In addition, federal initiatives tied to No Child Left Behind have required states to focus attention on teacher quality.

Although there is agreement among researchers and policymakers that teacher quality matters, none of the aforementioned reforms have successfully addressed problems related to recruiting new high-quality teachers, retaining the most effective teachers, and/or improving the existing teaching workforce. Merit pay is one form of differential pay that states around the nation, including Arkansas, have begun to explore as a viable solution.

In fact, during the 86<sup>th</sup> General Assembly of 2007, two merit pay bills became state law. The Rewarding Excellence in Achievement Program (REAP), Act 1029, successfully passed the GA as part of Governor Beebe's legislative agenda for the session. Through REAP, schools and districts with levels of teacher support that exceed certain thresholds may apply for a portion of the \$2.5 million that will be set aside annually for two years to support alternative teacher compensation programs. Local schools that wish to participate in the REAP alternative compensation pilot program must design a plan that rewards teachers for knowledge and skills, as well as for student performance.

The second bill, introduced by Senator Jimmy Jeffress, The Arkansas Alternative Pay Programs Act, passed the GA as Act 847. This legislation dictates the ways in which schools and districts may design merit pay programs. Act 847 does not affect existing merit pay plans or any plans that may be designed as a part of REAP. Key aspects of 847 are that no more than 50% of the alternative pay may correspond to student achievement, that the alternative pay plan must amount to 10% of a teacher's total compensation, and that a large percentage of teachers in a participating school must approve of a given merit pay plan.

Although both laws specify guidelines about the process of how merit pay plans can be adopted and about the components of potential merit pay plans,

neither law prescribes exactly what a plan must include. Therefore, individual schools and districts have the authority to design plans tailored to their local needs.

The purpose of this paper is to assist policymakers interested in exploring alternative teacher compensation systems. First, the paper provides a background for merit pay as an education reform; then it presents the general arguments of advocates and opponents of merit pay. Next, a description of the plans in existence across the country today is followed by a summary of the research concerning merit pay. Finally, this paper lists the characteristics of plans that are likely to be sustainable and to impact student achievement and school climate positively.

## **REFORMING TEACHER COMPENSATION**

Given that teacher quality matters for student achievement, the question arises as to what solutions are available to policymakers who wish to improve teacher quality. Some education reformers have suggested that altering the incentives for teachers might improve teacher quality. One way to change incentives is to adjust how teachers are paid. The current compensation system, which operates in over 95 percent of schools in America, uses a single salary schedule to base pay on tenure and level of degree (Protsik, 1996). Many researchers (e.g. Goldhaber, 2002) have argued, however, that additional experience and coursework for teachers do not lead to higher student performance. If policymakers wish to improve student performance, they might want to consider alternative compensation schemes.

Alternatives to the current system that policymakers might consider as ways to recruit, retain, and reward effective teachers include “lump sum” increases, differential pay, and merit pay.

### *Lump sum increases*

One policy aimed at improving teacher quality is to raise teacher salaries across the existing salary schedule. “Lump sum” increases are often tried as a strategy to improve teacher quality because they are politically palatable and supported by teachers. In Arkansas, policymakers implemented lump sum increases to provide an additional \$120 million for salaries at the end of the 2006 school year.

Although lump sum teacher pay increases might positively impact recruitment and teacher satisfaction,

this policy fails to provide real incentives to teachers already in schools to work harder or to become more innovative in their teaching. In essence, lump sum raises simply reinforce the status quo.

### *Differential pay*

A second policy option is differential pay, through which higher salaries are targeted at specific areas where teachers are needed. For example, teachers in hard-to-staff schools and/or subjects could receive higher salaries. Although differential pay may be an effective policy option for recruiting more teachers into given subjects or schools, this policy does little to impact teachers already in the classroom.

States across the country are currently using varied differential pay financial incentives such as loan forgiveness, housing subsidies, and signing bonuses (Milanowski et. al., 2007). Arkansas is one state that uses monetary bonuses to attract more qualified teachers into specific understaffed classrooms.

### *Merit pay*

If policymakers want to consider alternative pay structures that reward teachers for merit, they first must define merit. Several definitions of teacher merit are conceivable. Indeed, merit can be based on teacher characteristics, teacher behaviors, or the performance of students in the classroom.

Depending on the conception of merit, compensation plans could well be designed with vastly differing components. For example, compensation plans that define merit based on teacher characteristics provide incentives for teachers to get more advanced degrees. For the purposes of this paper, merit pay refers to programs that offer teachers and principals monetary bonuses for demonstrating certain levels of student achievement growth and earning high supervisor evaluations. Merit pay plans of this type are often termed pay-for-performance plans or incentive-based compensation plans.

One central assumption of merit pay is that many teachers can work harder or at least can adopt new instructional strategies that are relatively more effective. The idea of merit pay is that attaching monetary bonuses to outcomes, such as improved student test scores, rather than to inputs, such as more years of college preparation for teachers, will promote greater teacher focus on the desired outcome of high

student achievement. In short, the incentives change under merit pay plans and shift the focus toward student achievement.

## ADVOCATES AND OPPONENTS OF MERIT PAY

### *Advocates*

Those in favor of merit pay focus on the idea that incentive plans can promote greater salary satisfaction among teachers and can motivate teachers to be more innovative and to work harder. Merit pay backers believe that the results of such a system would be better overall instruction as manifested in higher student test scores. In addition, supporters suggest that merit pay plans can improve the overall quality of the teaching workforce by attracting different types of young professionals to the field.

Advocates believe that merit pay compensation systems that reward hard work and that provide more attractive salaries could motivate higher achievers to the profession who might otherwise not consider teaching. Furthermore, under the current system, highly-motivated teachers already in the workforce have no options to improve their salaries significantly other than to move into administration, which would remove such teachers from the actual classroom. Advocates argue that merit pay would allow the most effective teachers to earn higher wages while remaining in the classroom.

### *Opponents*

Foes of merit pay believe that these programs would create the wrong incentives for professionals in K-12 education by promoting counter-productive competition and feelings of jealousy. They also dislike that standardized test scores would be central to determining awards and fear that teachers would replace meaningful learning with rote memorization. They further attack the use of test scores in merit pay plans by saying that increased attention on standardized tests will lead teachers to try to game the system – either by cheating or by encouraging some students not to show up on days when tests are being administered. Additionally, they contend that test scores are simply an inappropriate way to determine teacher merit and any aspect of merit pay plans that include supervisor evaluation would lead to favoritism and subjectivity (Darling-Hammond, 1986; Johnson, 1984). Foes also believe that principals will place undue stress on teachers, who in turn will excessively

drive their students to perform; this unnecessary focus on testing will lead to feelings of unhealthy anxiety in both teachers and students. In sum, opponents believe that merit pay will lead to a disgruntled and exhausted workforce and ultimately to lower student achievement.

**Table 1** below outlines the controversy over merit pay and presents the major issues of contention with the viewpoints of both advocates and opponents.

## MERIT PAY ACROSS THE COUNTRY

This section describes a few of the merit pay plans currently in place. These descriptions are notably broad because even within a certain overarching program, such as the Teacher Advancement Program (TAP), variation exists when the program is adapted to an individual local school.

### *Denver ProComp*

Designed and adopted through a partnership between the Denver Public Schools and the Denver Classroom Teachers Association, this alternative pay system allows teachers who opt-in to the program to earn higher compensation based on whether or not they meet certain criteria. This plan rewards teachers for participating in extra professional development, for working in hard-to-staff schools, for earning high supervisor evaluations, and for having students who perform well on standardized tests.

Participating teachers earn bonuses that are percentages of their base salary. For example, a teacher who completes an advanced degree directly related to the current or proposed assignment can receive an annual salary bonus of 9%. This alternative pay scheme is less of a traditional merit pay plan because it awards teachers for more than just student achievement gains. The ProComp website at <http://denverprocomp.org> is extremely detailed and has a calculator that enables teachers to predict their future salaries based on their meeting the designated criteria.

ProComp is funded both by public taxes and the donations of a variety of charitable organizations. This alternative pay system has been approved for a total of 9 years.

### *Teacher Advancement Program*

The Teacher Advancement Program (TAP) is an alternative pay program that operates in approximately 125 schools across the country. TAP has also been in place in over a dozen Arkansas public schools across the state over the last few years. Founded by the Milken Family Foundation in 1999, this program attaches salary bonuses to increases in professional development, professional responsibilities, observed teaching skills, and student achievement. To participate, schools must apply and must demonstrate high levels of voluntary commitment to the program. More detailed information about TAP is available at <http://www.talentedteachers.org/tap.taf>.

#### *Achievement Challenge Pilot Project*

Since the 2004-05 school year, an evolving merit pay plan has been implemented in the Little Rock School District. The Little Rock pay for performance plan is called The Achievement Challenge Pilot Project (ACPP). For the 2006-07 school year, five elementary schools voluntarily participated: Meadowcliff, Wakefield, Geyer Springs, Mabelvale, and Romine. The ACPP uses student achievement as the sole outcome measure. Cash awards ranging from \$500-\$11,200 are attached to student gains on standardized tests. The combined awards for participating schools averaged approximately \$200,000 per school.

Classroom teachers receive payouts based on their own students' growth, and other building personnel receive bonuses based on school-wide growth. Both private foundations and public money support the \$1.2 million annual costs of the ACPP in Little Rock.

#### **MERIT PAY RESEARCH**

This section describes some of the research that has been conducted on various alternative pay programs in schools around the country.

While it is true that the best policy solutions are based on the evidence of research findings, unfortunately there is limited research on this topic. Most scholarly literature on merit pay includes conjecture and theory, and few rigorous evaluations of the impacts of merit pay on student achievement have been conducted (Eberts, Hollenbeck, & Stone, 2002; Figlio & Kenny, 2006; Podgursky & Springer, 2006).

Through the National Center on Performance Incentives and in cooperation with the US Institute of Education Services, Podgursky and Springer (2006) conducted a comprehensive review of merit pay systems. Their research discussed merit pay programs across the country including: Denver's Professional Compensation System for Teachers (ProComp), Texas's Governor's Educator Excellence Award Grants, Florida's Special Teachers Are Rewarded (STAR), Minnesota's Q-Comp, and the Milken Family Foundation's Teacher Advancement Program (TAP). They found that five of the seven existing studies had positive results.

Our own review which follows is related to the Podgursky and Springer research. Our research summaries below offer examples of alternative compensation plans across the country that had varied effects; some of the evaluations included below found positive impacts of their respective plans and others did not. It is important to note that these merit pay plans all used different criteria and mechanisms for determining teacher awards.

#### *Tennessee Career Ladder Evaluation System*

Instituted across Tennessee in the 1980s, this plan was intended to increase teacher motivation and thereby impact recruitment and retention of quality teachers. This plan used career levels for teachers that allowed them to earn more money as they advanced through the stages of the teacher career ladder. Johns (1988) surveyed 1,500 teachers to determine their perceptions of the plan. His evaluation, which was based only on perceptions and not on test scores, found that this type of program was not viewed positively by teachers. Of the teachers who responded, approximately 90 percent reported that the plan neither increased teacher morale nor enthusiasm for teaching. These respondents added that there might be better ways to recruit and retain high quality teachers.

A second, more recent study of this Tennessee career ladder plan (Dee & Keys, 2004; 2005) explored student test score data. These researchers suggested that elementary school students of career-ladder teachers performed better in math than students of non-career-ladder teachers. Their findings were mixed, however, since career-ladder teachers did not show higher student performance in reading. Furthermore, the study did not find that teachers who were higher on the

career ladder had uniformly higher-performing students.

#### *Utah Career Ladder Plan*

Horan and Lambert (1994) evaluated the Utah Career Ladder Plan of the 1990s by conducting surveys, focus groups, and interviews. The Utah plan, employed in 40 districts statewide, tied greater financial rewards to teachers who were able to advance up the career ladder. The researchers found that the Utah plan had a positive impact on teacher morale. A majority of teachers and principals in participating districts also reported that they thought the program contributed to better educational programs within the schools.

However, the evaluation also revealed negative findings. Some teachers felt that the performance bonus portion of the plan was administered unfairly and that the evaluation process on which that portion of bonuses was based was unclear. Some educators in participating schools reported increases in negative competition among their peers, while others reported increases in positive competition at the building level. Thus, the Utah Career Ladder Plan had mixed results.

#### *South Carolina Teacher Incentive Plan*

This plan, which was used during the 1988-89 school year, distributed monetary bonuses to teachers based on their meeting established criteria. Individual bonuses were connected to levels of attendance, performance evaluations, self-improvement, and student achievement. In addition, school-wide bonuses were given to educators in participating schools with high student achievement. The evaluators, Cohn and Teel (1991), found positive net results of this plan; students in participating schools tended to progress faster in reading and math when compared to students in non-participating schools.

#### *Dallas Independent School District's Accountability and Incentive Plan*

In this plan of the early 1990's, all school personnel in the highest-performing of participating schools earned awards based on school-wide student achievement gains. Ladd (1999) evaluated test score data and found that white and Hispanic students (though not black students) in participating schools had higher achievement gains than did students in comparison schools. Ladd also found that there were decreases

in drop out rates and increases in principal turnover. Overall, the findings of this study were positive.

#### *National Education Longitudinal Study*

Figlio and Kenny (2006) used data from the National Education Longitudinal Survey and the Schools and Staffing Survey. These researchers found that "students learn more in schools in which individual teachers are given financial incentives to do a better job." However, the researchers equivocated and stated that they "could not discern whether this relationship is due to incentives themselves or to better schools also choosing to implement merit pay programs" (p.17-18). Although this study had limitations, the overall results seem to suggest that merit pay can work.

#### *Research on TAP*

According to the executive summary of a study (Solomon et al., 2007) published by the program's administrative unit, in Arkansas "95% of TAP teachers made an average year's growth or more with their students, as compared to 75% of non-TAP teachers, a 20 percentile point difference." (p. 2).

The TAP website also reports that surveys of teachers show that 70% of teachers experience high levels of collegiality within the TAP schools. As with other studies of merit pay programs for which teachers must volunteer (including the ACPPE), studies of TAP schools have limitations. Although the TAP findings give reason for optimism, policymakers must be cautious in accepting these findings indiscriminately when participating schools are compared to non-participating schools.

As these studies show, the limited research on merit pay plans, though mixed, does suggest that well-designed and well-implemented plans can have positive effects on student achievement. There are limitations to the research, with the largest problem being the scarcity of available studies. Furthermore, the available research does not consider plans that were implemented long term. Many researchers also advocate the need for more rigorous studies of merit pay plans that use statistical methodology, rather than interviews and surveys. The Little Rock study which follows attempted to address this need by analyzing student achievement data.

## FINDINGS OF THE LITTLE ROCK STUDY

A team of researchers at the University of Arkansas conducted a study to determine the impacts of the ACPP, described above, on school climate and student performance. The second year study report is not yet available, but the results of this first year study suggest that merit pay can be an effective education reform.

Key findings were:

- Students in schools with merit pay showed an improvement of approximately 7 percentile points on average.
- Teachers in merit pay schools reported being more satisfied with their salaries.
- Teachers in merit pay schools reported that their schools were no more competitive than comparison schools.
- Teachers in merit pay schools were less likely than comparison schools to find low-performing students to be a burden.
- Teachers in merit pay schools reported that their school climate became more positive than teachers in comparison schools.
- Teachers in merit pay programs reported being no more innovative than teachers in comparison schools.
- Teachers in merit pay schools did not report working harder than teachers in comparison schools.

## FUNDING FOR MERIT PAY PLANS

As stated above, both public funds and private contributions support various alternative pay programs across the country. The US Department of Education also has made nearly \$100 million available for school districts to support merit pay programs through the Teacher Incentive Fund (TIF). The purpose of TIF grants is “to support programs that develop and implement performance-based teacher and principal compensation systems, based primarily on increases in student achievement, in high-need schools.” ([www.ed.gov/programs/teacherincentive/faq.html](http://www.ed.gov/programs/teacherincentive/faq.html))

Recipients of TIF grants include school districts in: New Mexico, Chicago, Denver, Houston, Dallas, Alaska, South Carolina, Philadelphia, and Ohio. In

order to win a TIF grant, these schools and districts provided matching funds from private donors and/or from their general operating budgets.

In Arkansas, the Rogers School District of Benton County has applied for these federal funds. The Lincoln School District in Washington County has also applied for a TIF grant to continue a merit pay plan instituted three years ago.

## CONCLUSION

The term merit pay can sometimes be misleading, for no two merit pay plans that have been tried are exactly alike. Incorporating arguments from Table 1 below, one could imagine developing programs that are more or less likely to promote the desired outcomes. From the evidence we examined, the plans that are mostly likely to be sustainable and to impact the school climate and student achievement positively contain several key elements. Consistent with many of the recommendations found in CPRE Policy brief on Performance Pay (Heneman, Milanowski, Kimball, 2007), we recommend the following elements be incorporated into the development of any merit pay plan aimed at recruiting, retaining, and rewarding effective teachers:

- Create a collaborative environment by offering bonuses to all personnel who impact student learning, including principals.
- Create monetary rewards that are large enough to matter to participants.
- Create a formula for determining bonuses that is easy to understand.
- Create the merit pay system with participant input.
- Create bonuses based primarily on increases in student achievement, as measured by test score growth.
- Create a merit pay system that enables all teachers who meet the criteria to be rewarded, not just a certain percentage.

**Table 1: THE CONTROVERSY OVER MERIT PAY**

<b>MAJOR ARGUMENTS OF MERIT PAY</b>	<b>ADVOCATES</b>	<b>OPPONENTS</b>
<b>MERIT PAY WILL IMPROVE/HARM COLLABORATION</b>	<ul style="list-style-type: none"> <li>-Teachers will share ideas even more because all in the building will earn bonuses with school-wide gains.</li> <li>-Well-designed plans will allow all teachers who meet established criteria to be rewarded; thus, there is no reason to compete.</li> <li>-With the proper system, teachers are competing against standards rather than one another.</li> </ul>	<ul style="list-style-type: none"> <li>-Teachers will not cooperate with one another because they will become jealous of those who get bonuses.</li> <li>-Because only a few teachers will get bonuses, teachers will compete with one another and not share ideas.</li> <li>-Merit pay plans are zero-sum systems.</li> <li>-Teachers who do not receive bonuses will become disgruntled and leave the field, which can create a teacher shortage.</li> </ul>
<b>MERIT PAY WILL INCREASE/DECREASE STUDENT ACHIEVEMENT</b>	<ul style="list-style-type: none"> <li>-Student achievement will improve because teachers will be given incentives to produce measurable outcomes.</li> <li>-All students matter when payouts are based on student growth.</li> <li>-Hard-to-teach students will be given greater attention than in the past.</li> <li>-Research suggests that teachers can impact student performance.</li> </ul>	<ul style="list-style-type: none"> <li>-Teachers will not focus on all students evenly.</li> <li>-Teachers will become stressed-out and less patient with students.</li> <li>-Due to the negative teacher effects, students will be overly anxious and unable to enjoy school with the result that they will learn less.</li> </ul>
<b>MERIT PAY WILL FORTUNATELY/UNFORTUNATELY LEAD TO TEACHING TO THE TEST</b>	<ul style="list-style-type: none"> <li>-Teachers who teach Arkansas standards using best practices, creativity, and innovation will produce the types of learning we want.</li> <li>-Teachers will be motivated to seek out new best practices to encourage gains on tests.</li> <li>-We have well made tests that measure concepts and ability rather than specific</li> </ul>	<ul style="list-style-type: none"> <li>-Teachers will focus only on tested subjects, and that focus will crowd out untested subjects, such as art.</li> <li>-Students will become test-taking automatons with no love of learning.</li> </ul>

	<p>information.</p> <p>-Teaching to the test is a good thing when the test measures the learning that matters.</p>	
<p><b>MERIT PAY WILL MAKE TEACHER COMPENSATION MORE/LESS FAIR</b></p>	<p>-Rewarding teachers who are most successful is the most fair way to compensate them for their hard work.</p> <p>-Bonus plans can be developed that are clear and understandable.</p> <p>-Teachers can contribute to the development of the payout plan.</p> <p>-The single salary system is unfair for disadvantaged students because it takes the best teachers and places them in certain schools.</p>	<p>- Plans that include teacher evaluations will promote principal favoritism.</p> <p>-Bonus plans will be based on secret formulas, and teachers should know how they are being paid.</p> <p>-A teacher should not be penalized in compensation for having a difficult class.</p> <p>-Basing pay on student performance is not fair because raising test scores is beyond the control of teachers.</p>
<p><b>MERIT PAY WILL LEAD TO MORE EFFICIENT/LESS EFFICIENT WORK, SPENDING, AND TESTING</b></p>	<p>-Plans can be developed that use existing testing.</p> <p>-Plans will motivate teachers to choose best practices to work smarter, not harder.</p> <p>-The compensation system we have is antiquated and does not promote teaching that makes a difference.</p> <p>-Investing in our teachers and students is worth the cost.</p> <p>-Rewarding good behaviors is less expensive than some alternative policies (e.g. class size reduction).</p>	<p>-Students will take more tests.</p> <p>-Teachers already work hard enough, and this will be one more thing for already exhausted educators.</p> <p>-Money should be spent on fixing the system we have, not on creating a new one.</p> <p>-Although it is good to pay teachers more, we should focus on improving the existing salary schedule.</p> <p>-We should reward teachers for experience and credentials.</p>
<p><b>MERIT PAY WILL INCREASE/DECREASE TEACHER QUALITY</b></p>	<p>-Bonus plans will draw more talented people to profession; students deserve the best.</p> <p>- Bonus plans will retain quality teachers by providing them with rewards and</p>	<p>-Merit pay will draw the wrong type of people to profession-those who are worried about money, not kids.</p> <p>- Teachers will become test-prep facilitators.</p>

	recognition within the profession.	
<p align="center"><b>MERIT PAY WILL MAKE SCHOOLS POSITIVELY/NEGATIVELY EXPERIMENTAL</b></p>	<p>-Innovative schools that want the best for their students will not continue to use practices that do not promote student achievement.</p> <p>-The traditional practices can be improved, and old versions of merit pay have been improved and can work.</p> <p>-Emerging research suggests that bonus plans can be effective.</p>	<p>-Merit pay plans are not yet proven to work.</p> <p>-Merit pay plans used in the past have not worked very well.</p> <p>-We need to stop experimenting on our children in schools.</p>

Written by: Marc Holley, Joshua Barnett, & Gary Ritter

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