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Teacher Performance Pay and Urban Teachers: Recommendations for Recruitment, Retention and Results

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Abstract

One of the main obstacles to urban educational reform is the perpetual problem of teacher attrition. High turn over rates leave our most needy children with the least experienced, least qualified teachers. The result is low student performance. Although performance pay programs are not new, most have not fulfilled their promised potential for reform. However, lessons have been learned and a reemergence of performance pay programs is growing. Researchers have developed a series of recommendations for the effective design and implementation of performance pay programs. Any district or state contemplating the possible use of teacher performance pay to retain quality teachers in urban schools would be wise to use these recommendations as they attempt to close the achievement gap between low and high poverty schools.

Teacher Retention

One of the main obstacles to successful educational reform and improved student achievement is the problem of teacher retention (Ingersoll, 2001). The constant amalgamation of new teachers undermines the consistency, implementation fidelity and success of all educational programs and policies. Trusting relationships, which are the foundation of all successful learning communities, are thrown into a constant state of transition and transformation. Time, money, effort, and opportunities to learn are wasted as schools are forced to train significant percentages of the staff every year. Any successful coach will tell you that it takes time for players to learn to work together, to become a team. How can educational leaders build a team of professional teachers working together to improve student achievement when 20 to 30% of the staff is new every year? Achieving and sustaining improvements in student achievement under such circumstances are very difficult.

In Texas in 1999, the overall teacher turnover rate was 19% [Texas Center for Educational Research (TCER), 2000]. In some states this figure is even higher reaching upwards of 25% (Crowe, Schaefer, & Barnes, 2006). It is important to note that these are average turnover rates. The problems with teacher attrition are even more pronounced for low performing, high poverty urban schools. A study by the National Commission on Teaching and America's Future (NCTAF) found that teacher turnover rates are roughly 30 percent higher in high poverty urban districts (NCTAF, 2003). The Association of Community Organizations for Reform Now (2004) used data from the Schools and Staffing Survey to study teacher attrition patterns in Chicago public schools and found that high poverty low performing schools had a teacher attrition rate 78% higher than low

poverty schools. 13 of the 64 ACORN schools had attrition rates over 30%. Hanushek, Kain, & Rivkin (2004) studying Texas teachers found that low student achievement was a significant contributing factor in a teacher's decision to leave urban schools. The same research group a year later found that teachers who were either in their first or last year on a campus had lower levels of student achievement (Rivkin, Hanushek, & Kain, 2005). One factor feeds on the other producing a synergistic negative force impeding efforts at educational reform for urban schools.

Hanushek (2007) wrote "it seems clear that the policies that aim to close the achievement gap must find ways to upgrade the quality of the teachers available to disadvantaged and minority students and to create incentives for these teaches to stay in these more challenging schools" (p. 579). Lankford, Loeb, & Wyckoff (2002) convincingly argued that most low performing, high poverty urban schools face tremendous challenges in attracting and retaining high quality teachers. They used data from the state of New York to identify schools with less than qualified teachers. Among their findings is that minority and poor children attend schools with the least qualified teachers.

Clearly, the problem of teacher attrition has the greatest impact on the children that need the most help, those who attend low performing high poverty schools. If we accept as fact that the quality of the teacher is the largest predictor of student achievement (Wright, Horn & Sanders, 1997), it becomes clear that the best way to close the achievement gap is to attract and retain high quality teachers in urban schools. Before this is possible, we first must identify the factors responsible for the high rates of

attrition, explore avenues to mitigate their influence, examine the cost of action or inaction, and remove the barriers associated with the single salary structure.

The Cost of Teacher Attrition

According to the TCER (2000), the annual cost of teacher attrition to Texas Public schools is between $329 million and $2.1 billion dollars. Include the estimated costs from the other 49 states and the District of Columbia and one can easily see the impact of high teacher attrition. Each year the cost would approach and probably exceed the amount of Title 1 funding states receive from the federal government for disadvantaged children (U.S. Department of Education, 2000). Related cost incurred by districts as the result of teacher attrition include separation costs such as changes to benefits and payroll, exit interviews, and completion of teacher service records, hiring costs such as advertising, application processing, interviews, and criminal background checks, and training costs such as new teacher orientation and professional development. These tangible costs are only part of the picture. Assessing the true cost of teacher attrition requires that we include the organizational disruption that is inevitable when a quarter of the staff is new every year.

According to Guin (2004), schools with high attrition rates have difficulty building and sustaining relationships, planning and implementing an aligned curriculum, developing and providing a coherent professional development program, and establishing an instructional program that leads to student achievement. Several of these components listed by Guin are related to the correlates of effective professional learning communities (See Blankstein, 2004; DuFour, Eaker & DuFour, 2005; Huffman and Hipp, 2003). If we

are going to create environments where teachers work together to identify and meet the needs of all learners in a continuous process of collective learning and application all for the purpose of increasing student learning, we have to start with relationships. Time and opportunities are wasted when 1/3 of the staff has to be retrained every year and new relationships have to be built. Most first year teachers are simply trying to survive, let alone genuinely participate in professional learning communities. However, one caveat must be brought to light. There is a difference between losing the same 1/3 of the staff every year and retaining a solid core of teachers and losing a different third every year. The latter situation is far more damaging. How can we put a dollar figure on these lost learning opportunities?

Why do teachers leave?

Why do so many teachers leave urban high poverty schools for more affluent suburban districts or different occupations all together? Is it the low wages, poor working conditions, non supportive or adversarial parents, inattentive administrators, disrespectful unmotivated students or some combination of the above? If we can identify the significance of the factors responsible for high teacher attrition we might be able to strategically design incentive plans and operational policies to alleviate some of the negative forces driving teachers from the profession.

Stotko, Ingram, & Beaty-O'Ferrall (2007) reviewed data from the New Teacher Project and Teach for America and found that the 5 main reason teachers leave urban schools are a lack of student respect for teachers, low levels of student motivation and involvement, problems with classroom discipline, low salaries and limited resources.

Arguably, teachers have some locus of control over four of the five main reasons for urban teacher attrition. For example, teachers can enhance motivation and involvement by using specific instructional strategies to explore relevant curricular material. Teachers can improve classroom discipline by effectively planning engaging lessons, building relationships with students and consistently enforcing classroom rules in a fair and equitable manner. Teachers can make due with limited resources, seek additional supplies through parent donations or, as is often times the case, spend their own scarce money on classroom supplies. The one factor that teachers cannot control under the traditional schedule is their salaries other than getting an advanced degree. Would the strategic use of incentive and performance pay systems attract and retain higher quality teachers in urban schools? According to Goldhaber (2006) "compensation is the key workforce policy that holds promise for reform" (p. 1). Unfortunately, most states have not used this tool to promote a more equitable distribution of quality teachers, but this is changing as many states are currently experimenting with different pay structures.

Stotko et al. (2007) noted that other factors can increase teacher retention other than salary incentives. For instance, new teacher that were provided extensive mentoring are more than twice as likely to return for their second year as are those who do not have the opportunity for collaboration with colleagues about instructional and curricular issues. Teachers that were provided relevant quality professional development along with coaching assistance from instructional specialist were more likely to return for their second year as were those who taught in attractive, well organized schools? While addressing these issues might have some positive impact on teacher retention in urban schools what is clear is that effectuating successful change is going to take a multi

pronged approach. Therefore, it is advised that any district or state considering implementing performance pay models for teacher compensation, should address other collateral issues contemporaneously such as increasing administrative support, decreasing isolation and private practice by promoting a culture of collaboration and shared practice, and improving the condition of urban school facilities (Buckley Schneider and Shang, 2005).

The Single Salary Schedule

For years economist and researchers have argued that the single salary schedule has little if any connections to student achievement. Typically, teacher compensation is a single pay system based upon years of experience and graduate education, but these two factors have little correlation with student achievement (Hanushek, 2006, 2007; Podgursky & Springer, 2007). If performance pay systems are going to improve the retention of high quality teachers and improve student achievement, they must be based on other measurable factors related to teacher quality. According to Odden and Picus (2008), performance pay programs are not a new innovation in education, numerous programs have been implemented, but nearly all have failed.

One of the more prominent factors in the failure of previous performance pay programs is the opposition of teacher unions to almost every incentive pay plan ever proposed. (Poole, 2002). One of their main concerns is the means by which performance is measured and hence the way that bonuses are awarded. How can we be sure that differences in student achievement are caused by variable teacher quality and not by dozens of other factors such as socioeconomic status, the educational level of the mother,

the atmosphere of the home or the culture of the school? Murnane and Cohen (1986) found that validity problems in the evaluation of teacher performance were a significant factor which undermined the success of most performance pay programs. If teachers are going to trust any incentive pay system and hence be motivated by its possible rewards, it must be based upon a performance assessment system that has content validity. Although principals are good at identifying the top 10 to 20% and bottom 10 to 20% percent of teachers in terms of the quality of instruction with subjective evaluations, they have trouble distinguishing between levels of quality for the middle 60-80 percent (Jacob & Lefgren, 2006). Basing a performance pay program on these subjective evaluations lacks the necessary content validity.

Value Added Measures

In today's data rich environment, we now have the ability to look at more objective measures of teacher quality. Software programs such as I-Nova and Eduphoria allow districts to measure how much learning is occurring in each teacher's classroom for every child while controlling for other influential variables. The system is not perfect, but there is a strong link between these measures of teacher evaluation and student performance. Odden (2004) states that 'educators have learned how to design and operate performance based teacher assessments that have sufficient reliability and validity to use for consequential decisions such as triggering pay increases" (p. 126). This measure has been referred to as a value added measure and it varies significantly from teacher to teacher. Hanushek (1992) used outcome based measures to show that good teachers can

produces gains equivalent to 1.5 years of learning while poor teachers may only get .5 years of learning in any single academic year from a similar groups of students.

Harris (2008) has studied value added modeling programs extensively and concludes that measuring the quality of the teacher is more than simply choosing between the traditional method such as experience, degrees or certifications obtained, and classroom observations and the more objective value added measure. While value added measures are positively correlated with student achievement, these measures are not precise and vary considerably over time for individual teachers. Determining teacher quality requires the use of multiple measures.

As noted, there has been a reemergence of interest in using performance based pay systems to improve teacher retention and students achievement in low performing schools. Odden and Picus (2008) observed that most incentive pay structures for teachers include multiple variables that trigger bonus pay such as a direct measure of effectiveness or the acquisition of knowledge and pedagogic expertise. By structuring teach pay around bonuses received for meeting target learning objectives, there is an incentive for teachers to improve their capacity and effectiveness. They will be more inclined to continuously look for effective ways to structure the learning environment in ways that are conducive to student growth.

Several states and districts have recently implemented or will be implementing new performance pay programs in an attempt to improve the quality of instruction and amount of learning taking place in urban schools. The Federal Government through the Teacher Incentive Fund provided over $80 million in 2007 for incentive pay programs in 18 states (U.S Department of Education, 2007). The rebirth of incentive pay programs

will provide numerous opportunities for researchers and practitioners to identify the characteristics of effective programs to assist in future designs. What does the current research tell us about effective incentive pay programs?

Do Incentive Pay Programs Increase Teacher Retention and Student Achievement?

Surprisingly, research is not abundant in the field of bonus and incentive pay programs for teachers, but enough programs have been studied to provide definitive guidance about the construction of future programs. Podgursky and Springer's (2007) reviewed performance pay research and noted incentive pay plans have produced positive effects on learning. This increase is partially attributable to a selection effect due to the increase size and quality of the applicant pool. As Jim Collins (2001) would say we are getting more of the right people onto the bus. Additionally, they noted that merit or performance pay systems also produce substantial, positive, long term effects.

Figlio and Kinney (2006) utilized the National Educational Longitudinal Survey (NELS) to measure the impact of merit pay systems and student performance. They received surveys from 534 schools included in the 12th grade NELS sample. They cross referenced this information with data from the School and Staffing Survey (SASS) to identify schools that utilized merit pay systems. The methodology was convoluted due to an eight year gap between their study and the collection of the NELS data. Numerous variables had to be controlled for to isolate the impact of the merit pay system. Analyses of differences between the structural components of individual programs were measured by separating schools according to the degree of the incentive offered. Schools were also

grouped according to whether they were public, private catholic or other private. Several statistically significant relationships were noted.

First and foremost, Figlio and Kinney (2006) found that the use of teacher incentive pay programs is associated with higher levels of student achievement in both public and private schools. The use of incentive pay programs raised test scores from 1.3 to 2.1 points. Children from low income schools were more likely to show improvement. However, the structure and design of the incentive programs are important. Those programs which had at least a 20 percent range in salary, only awarded bonuses to 5 percent of their teachers and no more than 7 percent of the staff showed the largest gains, however gains in student achievement were seen in schools with far more liberal incentive pay distribution. There is a threshold however below which incentive pay programs lose the incentive part of the program. Those programs which offer bonus pay to most of the staff don't produce increases in student performance.

Second, they found that private schools are more likely to use teacher performance incentive pay programs. Private schools that used incentive pay programs produced larger gains in student performance than public schools but the public school coefficients were still significant. The authors do caution that these results are not conclusive. They were unable to determine if some other factor related to quality schools is accounting for the increases.

The state of North Carolina used a bonus pay program offering $1,800 per year for three years in an attempt to attract and retain math, science and special education teachers in low performing high poverty schools. According to Clotfelter, Glennie, Ladd and Vigdor (2008), the program had several design and implementation flaws that

undermined the results. The plan was very complex and most administrators and teachers misunderstood and misapplied the program. The first year the plan was put into effect almost all of the teachers for 2001 school year had already been hired. As a result, the data for the first year of the three year plan was worthless. The first year the state misidentified 60 percent of the eligible schools for the program producing further confusion. For the following year the list of eligible schools was not produced until January again making the program useless in attracting better teachers to low performing, high poverty schools in high need areas. The state never capitalized on using the bonus as an incentive to increase the applicant pool. This program would be the equivalent of a car dealership selling a lot full of cars then determining which purchasers would receive rebates. The rebate would have little if any impact on the original decision to purchase. As you can imagine the program had no statistically significant impact on retention rates of teachers. Is $1,800 enough to overcome the working conditions associated with low performing high poverty schools? We can't tell from these results because the implementation of the program never gave it a chance to work. The state legislature finally cancelled the program.

The state of Florida has initiated an incentive merit pay system in addition to other policies designed to attract and retain high quality teachers in low performing high poverty schools. Originally, the plan developed by the Florida Department of Education was designed to ensure that at least ten percent of a district's teachers were given bonus pay of not less than five percent of their annual salary in recognition of student achievement. The Florida Legislature took the program, increased its funding from $55 million to $147 million and renamed the program the STAR (Special Teachers are

Rewarded). The increased funding now allows 25 percent of Florida's teachers to receive a performance bonus of about $2,000 annually (Hanushek, 2006). The program known as E-Comp is only one of several state initiatives to reward effective teachers and to improve teacher quality in urban schools. According to Hanushek (2006), "The key element of Florida's programs is that the funding is following those who improve student performance" (p. 158). Whether it improves student performance depends upon two factors: a) Are the incentives enough to motivate teachers and b) do the bonuses increase the retention of the right teachers, those that are effective? Hanushek makes six recommendations to improve Florida's efforts.

1. Reward administrators for improved student achievement to strengthen support and focus on the meeting the target learning objectives

2. Monitor the amount and distribution patterns of the awards to avoid watering down the incentive or performance expectations

3. Have the courage to make appropriate retention decisions

4. Continue to find ways to retain experienced effective teachers in schools with high percentages of disadvantaged children

5. Make sure teacher compensation is competitive with other markets especially in hard to staff subjects such as science and math

6. Conduct more thorough program evaluations so others can learn from the efforts of the state of Florida.

Colorado has two plans, one in Douglas County Colorado and the other in Denver. Denver's plan is somewhat unique in that it combines the aspects of various plans by rewarding school based performance, the acquisition of knowledge and skills,

and student growth as well as recognizing the need for market incentives. The four year pilot program in Denver produced changes in teacher attention to formative assessments and changes in instructional methodology. All schools where high levels of teachers met learning objectives had improved student achievement, however, the program did experience problems with aligning assessment data with professional development units and human resources approaches (Heneman, Milanowski and Kimball, 2007).

Dallas ISD has used a school based performance based awards plan in an attempt to increase teacher motivation and effort. 20 percent of the schools in the district each year received $1,000 bonuses for administrators and teachers and $500 bonuses for all other staff. Additionally, each school meeting target objectives received $2,000 for the school's activity account. The results were mixed. According to Ladd (1998), the program increased passing rates for 7th grade White and Hispanic students and lowered drop out rates compared to other large urban schools districts in Texas. As is the case with most other performance pay systems, it is very difficult to establish if the increases in student learning were attributable to changes in teacher practice as the result of the new pay system or to some other program designed to increase students learning.

Kelley, Heneman, and Milanowski, (2007) analyzed the motivational impact of performance pay plans on teachers in Charlotte-Mecklenburg, North Carolina and Kentucky. Kentucky and Charlotte-Mecklenburg operate school based performance based award programs where all teachers and many times other staff members receive a bonus for reaching school wide achievement measures. This approach is designed to promote collaboration and teamwork for achieving target objectives. Results of both programs indicate that there was a high level of understanding and commitment toward

program goals among teachers. The accountability measures focused teacher attention and effort on achieving program goals and many teachers reported that they changed their teaching methodology to align with curriculum, instruction and assessment objectives. However, the overall results were mixed as some teachers felt as if the program diverted attention from other noteworthy programs, produced increased stress and narrowed the curriculum. The authors recognize that it is difficult to isolate the true impact of the performance pay programs due to the fact both programs were a part of larger reform efforts with multiple policy interventions operating simultaneously.

Kelley, Heneman, and Milanowski, (2007) recommend the following when designing school based performance awards programs. First, make sure teachers understand and commit to the goals. Second, reduce counterproductive stress by providing administrative support, adequate resources, and the necessary professional development to accomplish program objectives. Third, follow through on bonus awards to remove skepticism and build trust in the program. Fourth, make the goals achievable as most people will not expend much effort to accomplish unrealistic goals. Fifth, expend additional effort by involving teachers in program design to make sure the program is perceived to be fair in the way it measures student performance and other indicators of teacher quality. Sixth, programs should reward campus administrators as their support is critical to program success. What is clear from this study is that "motivational impact is not guaranteed simply by promising teachers a bonus" (p. 397). Creating an effective performance pay program which improves teacher motivation and effort to meet campus learning objectives requires a plethora of interdependent mutually supportive policies and initiatives.

Other researchers have identified characteristics of effective performance pay programs for teachers and developed recommendations that policy makers should take into account when designing performance pay programs. Odden (2004) made several recommendations for the design and implementation of pay systems based upon teacher and student performance.

1. Develop or use a set of standards which precisely describe what teachers are required to teach and what they should be able to do not just from an instructional sense but from multiple perspectives.

2. Develop a system for the collection of multiple forms of data regarding teacher and student performance and a fair means of aggregating scores to determine performance awards.

3. Develop a reliable and valid set of guidelines for assessing teacher instructional performance and a system to promote the use of effective teaching strategies through collective learning and professional development.

4. Develop a pay incentive system linked to teacher and students performance that is fair and easy to understand.

5. Align HR to make sure that recruits possess an identified set of skills and characteristics for effective performance.

Odden (2004) recognizes that additional research needs to be conducted but acknowledges that the results of the few performance pay systems that have been operational are encouraging. While many have failed to produce the types of substantial change needed, what has been learned will enable future efforts to avoid some of the mistakes and incorporate some of the effective design characteristics.

Heneman, Milanowski and Kimball (2007) constructed a policy brief on the nature and effectiveness of incentive and performance pay plans currently in place in various states and districts around the country. They divided the performance pay plans into three basic designs: school based performance awards where all teachers in the school receive a bonus if learning targets are met, knowledge of skill based programs where teacher receive bonuses for completing new certifications, technology skill assessments, and graduate degrees, and combined plans which use multiple measures to reward student growth. Based upon their analysis they constructed a series of guidelines and suggestions for policy and practice.

1. Design a valid system of measurement which utilize multiple measures of teacher quality including job embedded professional development, advanced degrees, effective collaboration with colleagues, principal evaluations and objective value added student performance.

2. The amount of the bonus or incentive and the perceived fairness of the pay system are critically important and must be consistent with researched based principles of employee motivation.

3. Additional supports and resources are must be available to support the system. Money by itself is not enough. Allocate funding to hire support staff so teachers can focus on effective teaching and student learning.

4. Attention must be focused on aligning the focus of human resources to support the overall improvement efforts. This includes recruiting the right teachers, supporting them through mentoring and job embedded professional development to build and utilize effective instructional practices and compensating those who meet valid performance

targets. Timing is also important. Advertise, interview and offer contracts early before the applicant pool is depleted.

5. Secure stable funding and provide a competitive base pay before you add on bonuses or performance incentives.

6. Use the pay plan within a broader strategy of school improvement and educational reform and facilitate the use of structured mentoring for new teachers, provide instructional coaches, and develop professional learning communities to increase the capacity of the entire staff.

7. Teacher acceptance of the differentiated pay plan is essential to the success of the program. Involve teachers and teacher association in the design of the program. Saturate the market with information about the plan and communicate with all stakeholders to build familiarity and understanding.

8. Include principals and other administrators.

9. Conduct a pilot program to evaluate its effectiveness, modify where necessary and build teacher trust and acceptance of the program over time.

Predicting the Success of Future Programs

As mentioned several times in this literature review dozens of new programs are being designed and implemented across the country. Hopefully, those responsible for the design of each program are intimately familiar with the recommendations based upon previous attempts at utilizing performance pay systems. If they are, and if they carefully take into account the myriad of related issues and factors, the chances of the ultimate success of the program will be greatly enhanced.

Fort Worth ISD is in the initial stages of implementing a performance pay system pilot program to attract and retain higher quality teachers in 15 of their lower performing schools. This program is known as the PEAK program (Public Educators Accelerating Kids). Approximately $4.1 million has been secured from the state of Texas through the District Awards for Teacher Excellence Grant which offers considerable flexibility to local districts in the design of performance pay programs to target specific campuses such as those in urban areas. Fort Worth ISD will also be contribute $5 million in local funding each of the next three years to support the program.

The design task force for the program included central office administrators, campus principals, parents, teachers and representatives from several teacher associations. The process of school selection for participation in the program was based upon 4 characteristics, consistently low academic performance especially in math and science, high levels of economically disadvantaged and minority students, high percentages of inexperienced teachers and high teacher turnover rates. Although no data currently exist as the first year of the program will be the 08-09 school year, looking at the design characteristics it appears as though Fort Worth ISD has really done its homework and designed a program with a substantial likelihood of success.

The program aligns HR processes by utilizing specific criteria in the recruitment and selection of PEAK teachers. Teacher selection was based upon a myriad of characteristics and was a collective decision made by a three person interview panel. All teachers participated in the Star teacher interview developed by Haberman to measure the likelihood of successful teaching in high poverty urban schools. It has been shown that teachers with high scores on the Star interview have higher rates of retention in urban

schools (Haberman, 1995). Other selection criteria included a history of student success as measured by a value added index and an understanding of and a desire to work in a collaborative culture of continuous improvement. Fort Worth ISD made a significant investment in advertising the need for and purpose of the program. They completed the interview process and offered contracts early to avoid making selections from a depleted applicant pool.

The PEAK program provides numerous additional supports to reduce the stress on teachers and to free up time for collaboration, collective learning and application. Each PEAK school will have dedicated master content teachers to support core area teachers, a structured mentoring program to support new teachers, aides to run copies, additional administrative support, a campus testing coordinator and data manager, a full time parent liaison and smaller class sizes. In addition, facility improvements will be provided as prioritized by campus teams.

The target objective for each PEAK school is to either meet AYP or to make substantial improvements toward the target objective. At the time of submission of this paper, substantial improvement had not been precisely defined. This is a critical hurdle that Fort Worth ISD must address carefully. Given the fact that trust in a fair system is essential for teacher motivation and support, clarifying and establishing realistic, easy to understand target objectives must be established.

The program is a combined program offering recruiting incentives and students achievement rewards. Teachers have the chance to receive rewards for, grade level performance, content area performance and school wide performance which not only stimulates individual motivation, but promotes collaboration and cooperation both

vertically and horizontally. Fort Worth ISD is committed to a team based approach. The potential amount of the rewards, $13,000 for high school teachers and 10,000 for elementary teachers should be enough to significantly enhance motivation and effort. Principals, assistant principals, counselors and librarians as well as other non core staff members have the chance to receive performance incentives for meeting school based performance targets. Additional bonuses are available for hard to staff positions such as secondary math and science teachers and elementary bilingual teachers.

The PEAK program is only one of dozens of new performance pay programs for teachers. Although empirical data on the impact of these pay systems on teacher retention and student performance is currently limited, this will soon change. Opportunities for research abound in this area and soon policy makers should have reliable concrete evidence concerning the most effective means of utilizing performance pay models to impact teacher retention and students achievement in low performing urban schools.

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