Strategic Design of Teacher Compensation

Education Resource Strategies October 2012
Acknowledgements

We would like to thank the primary author, Regis Shields, Education Resource Strategies’ Executive Director, Karen Hawley Miles and the ERS team for the support, energy and insight that made this report possible, especially Genevieve Green, Chris Lewis, and David Bloom.

We are also grateful to the Bill & Melinda Gates Foundation for providing both funding and guidance for this report. In particular, we would like to thank Mike Copland, Patricia Loera, and Greg Sommers for their insight, support, and guidance. We would also like to acknowledge the input of Dan Goldhaber, Bryan Hassel, Paul Kihn, John Papay, and Kathryn Shaw. This group of advisors provided much of the initial thoughts on the framework for this report, and much of the report is based on their research.
Contents

Introduction ........................................................................................................................................... 2

Components of Compensation Design ............................................................................................... 5

What You Need To Know About:

Base Salary ........................................................................................................................................... 7

District Priority Incentives .................................................................................................................. 12

Differentiating School Roles and Responsibilities ............................................................................. 16

Bonus Pay ............................................................................................................................................. 21

Creating a Financially Sustainable Compensation System .............................................................. 24

A Compensation Glossary .................................................................................................................. 27
Spurred by the national focus on revitalizing the teacher evaluation and support/development process, as well as the current economic downturn, many school districts are reviewing how teachers are compensated. While a few courageous districts have completely upended current structures, most districts are undertaking changes that leave the most prevalent structure—experience steps and educational attainment lanes—untouched, with modest tweaks at the margin to recognize performance and contribution. However, layering new structures on top of old ignores research that shows experience (after the first five years) and educational attainment have little impact in improving student achievement. Further, the incremental approach perpetuates incentives embedded in step-and-lane structures that limit career opportunities for teachers and impede districts’ ability to optimize resources to create the strong teaching force our students need.

As districts consider new compensation structures, they are moving into mostly uncharted territory. The majority of the school systems across the country implement the basic elements of the step-and-lane compensation structure that treats all teachers the same, regardless of contribution or performance. As a result, there are few proof points that districts can draw from as they undertake a design process to link teacher compensation with performance and contribution.

The road ahead is not without guideposts, however. In the current wave of compensation reform, one school district—Denver, Colorado—has had a comprehensive structure in place for a sufficient length of time to adequately evaluate the effectiveness of specific performance and contribution components. In addition, there are a handful of formal evaluations on the various performance bonus structures that school districts and states have put into place over the last 10 years. School districts can also draw from lessons learned in other professions, both private and public sector. Finally, they can look abroad to practices of high-performing education systems in other nations, as well as emerging and established research on employee motivation for the marketplace in general and for the teaching profession.

The series of guidance memos that follow are intended to provide teachers, districts, Charter Management Organizations (CMOs), and states with a starting point on this journey of reinvention. They provide a high-level summary of how the salary component of a teacher-compensation structure can integrate performance and contribution. We focus on the salary component for two reasons. First, it represents the largest share of teacher compensation both from the perspective of the employer and the employee. Second, it is the primary—and, unfortunately, usually the sole—focus of nearly all districts currently contemplating compensation reform.

The Context for Compensation/Career Pathway Design

As you engage with these guidance memos and explore compensation and career pathway design,
please bear in mind an important caveat: Salary is only one component of teacher compensation that districts should consider as part of an integrated, coherent package as they seek to attract, retain, and leverage a highly effective teaching force. Other important elements include not only retirement and health benefits, but also professional growth opportunities, working conditions, fringe benefits, career pathways, and non-monetary rewards. The specific combination of these elements, plus salary, is the “Value Proposition” —what an employer must give to get the working force it needs to accomplish its articulated goals.¹

Introducing new organizational structures such as a revised salary schedule or teacher evaluation system, requires that districts adopt a set of complementary human resource management practices that support the new structures and the district’s overall strategy.

The Intent of Compensation Design

These guidance memos must also be viewed through the lens of the employer’s specific intent: What does the school district hope to achieve through its compensation/career pathway structure? Without clear goals in mind at the outset of the design process, chances of achieving these goals are greatly reduced. Although the step-and-lane salary structure may have been adequate to meet recruitment and retention goals in the past, it is woefully insufficient to attract and retain teachers with the skill and knowledge required to reach current student achievement goals.

The table on the next page provides a potential set of goals that a district may hope to accomplish with its compensation/career pathway structure. Note that structures enacted under these goals or similar sets of goals will not all look the same; they may vary due to each district’s available revenues, legal context, community norms, and district needs and priorities. The series of guidance memos on salary components that follow do not prescribe a specific structure but intend to provide research, evidence, and principles that school districts should consider as they design a compensation/career pathway structure that will achieve their clearly articulated goals within their particular context.
For more details on the Value Proposition, please refer to “Rethinking the Value Proposition to Improve Teaching Effectiveness,” a forthcoming publication by Regis Anne Shields and Christopher Lewis.

The table on the facing page describes the components of compensation including the base salary, benefits, and “district priority incentives,” which is a term we use to describe extra pay a district or school might add to attract teachers in specific priority areas like shortage subjects or high needs schools, and bonuses. The memos that follow cover each of these components with the exception of benefits.

What does the school district/CMO hope to achieve through its compensation/career pathway structure? Without clear goals in mind at the outset of the design process, chances of achieving these goals are greatly reduced.

THE GOALS OF A TEACHER COMPENSATION/ CAREER PATHWAY SYSTEM

<table>
<thead>
<tr>
<th>The Why</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A teacher compensation system should support the district’s efforts to</td>
<td></td>
</tr>
<tr>
<td>ATTRACT a high-potential teaching force</td>
<td></td>
</tr>
<tr>
<td>RETAIN a high-performing teaching force and encourage low performers to</td>
<td></td>
</tr>
<tr>
<td>LEVERAGE the highest performers for continuous improvement in district-</td>
<td></td>
</tr>
<tr>
<td>ALIGN a high-performing teaching force to support district strategies and</td>
<td></td>
</tr>
<tr>
<td>Compensate a high-performing teaching force in a FINANCIALLY SUSTAINABLE</td>
<td></td>
</tr>
</tbody>
</table>

1 For more details on the Value Proposition, please refer to “Rethinking the Value Proposition to Improve Teaching Effectiveness,” a forthcoming publication by Regis Anne Shields and Christopher Lewis.
The components of compensation must be considered as a whole package and not in isolation.

*Benefits are briefly explored in the section, “Creating a Financially Sustainable Compensation System” of this publication.
HOW TO READ THE MEMOS ON THE FOLLOWING PAGES

Each guidance memo is organized to meet the needs of users with various levels of knowledge about teacher-salary structure basics:

THE BOTTOM LINE:
A summary of the key message or take-away for users who may already be grounded in the topic.

DEFINITION:
The specific definition of the salary component to ensure all users are on the same page.

CURRENT CONDITIONS:
The current state of teacher salary structures and the specific impact of the structure in terms of teacher demographics and behavior.

WHAT WE KNOW:
Evidence and research to inform new designs.

CROSS-SECTOR COMPARISONS:
A high-level summary of structures of other relevant public- and private-sector professions.

IMPLICATIONS FOR DESIGN:
Specific salary-structure recommendations based on the accumulated knowledge and research.

ESSENTIAL READINGS:
One or two key readings for those who wish to explore the topic in greater depth.
What You Need To Know About:
Base Salary

The Bottom Line
To attract candidates with strong academic backgrounds and relevant skills and to retain only those teachers who perform effectively, base salary must incorporate labor market dynamics by:

1. Being competitive with other professions that attract top academic candidates.
2. Increasing based on proven performance and contribution.
3. Differentiating so that individuals with skills and knowledge that demand higher pay in the labor market will consider teaching an attractive option.

Definition: Base salary is the foundation of a salary structure. It is the pay received for a given work period for a particular set of responsibilities and skills. It does not include additional pay for overtime or additional roles, or performance bonuses. Base salary generally increases over time based on employee performance and responsibilities.

Current Conditions
• The majority of the school systems across the country implement the basic elements of the step-and-lane compensation structure that treats all teachers the same, regardless of performance, skill or responsibility. In this structure, teachers receive an automatic annual salary increase—step—for an additional year of experience. Teachers may also earn a permanent increase in base salary for attaining set numbers of educational credits—a lane. Teacher performance, skill, and responsibility are not considerations in determining salary levels or increases.

• In addition to these increases, teachers receive cost of living increases and adjustments to reflect the growing cost of living. Often these percent increases are pre-negotiated into the contracts and may not actually reflect economic reality.

• In the United States, teachers generally come from the lower performance ranks of college graduates. Only 23% of teachers come from the top third of graduates; just 14% in high poverty schools. Teachers in the top quartile of performance distribution on teacher entrance exams are twice as likely to leave the profession as those in the lowest quartile.

What We Know
• Research has shown that years of teaching experience have little effect on student performance after the first three to five years, and there is no demonstrated correlation between teaching effectiveness and educational attainment beyond a bachelor’s degree, except for a slight impact in the case of high school math and science.

• An international study by McKinsey & Company showed that high performing school systems implement deliberate strategies to recruit candidates from the top third of college graduates. A competitive compensation and career pathway structure that takes labor market factors into consideration is one critical component of a multi-faceted recruitment strategy.

In the United States, teachers generally come from the lower performance ranks of college graduates. Only 23% of teachers come from the top third of graduates.
• The same international study revealed that high-performing education systems make labor market comparisons by looking to other professions that attract the top academic talent, such as law or medicine.

• The most significant differences between teaching and the chosen careers of top-third college graduates are rooted in compensation and career pathway opportunities. With regard to attracting and retaining top-third students, both starting salary and maximum potential salary have been identified as critical factors in compensation structures.5

• McKinsey’s market research shows that only 10 to 18% of top-third students say teaching offers a competitive starting salary, pays appropriately for the skills and effort they would bring, or offers a salary that would increase substantially over the next seven to 10 years. Only one in three think teaching pays enough to support a family, and more than half believe they could earn more as a garbage collector.6

• Teacher salaries typically grow more slowly in years 3-10 than other professions. Four years out of college, the gap in salary between teachers and non-teachers with technical (math and science) training is $13,469 and $6,811 for their non-technical peers.8 Ten years out of college, the salary gap between teachers and non-teachers with a technical degree is $27,890. For those without a technical degree, the salary gap is $18,904.9

• This growing salary gap may make it more difficult to attract and retain teachers with technical skills and knowledge. Data from the National Center for Education Statistics’ Schools and Staffing Survey, which examined characteristics of teachers who exited the K-12 profession, showed that math and science teachers who left the profession were almost twice as likely as other teachers to rate better salary or benefits as very important or extremely important reasons for leaving.10

• Researchers found that teachers with high ACT scores leave hard-to-staff schools for higher pay and remove themselves from work environments with colleagues they perceive as less academically successful.11 While small increases in pay reduce attrition among elementary school teachers, larger increases are required to retain female math and science teachers.

---

**Salaries for American teachers with 15 years’ experience are, on average, 60% or below of full-time earnings for 25- to 64-year-olds with tertiary education in the United States.**

• The annual salary of teachers in the United States tends to be lower than the annual salary of college graduates employed in other occupations. While teachers typically work a shorter year and receive a higher level of benefits relative to their counterparts in the private sector, teachers with 15 years of experience also receive salaries that are 60% or below that of full-time earnings for 25- to 64-year-olds with tertiary education in the United States.7 This salary gap is significantly wider than the wage differential that exists between teachers and non-teachers in most other countries of The International Organisation for Economic Co-operation and Development (OECD).
Cross-Sector Connections

- Private sector compensation reflects individual attributes (including performance on the job and selectivity of one’s college) and the attributes of a particular job (supply and demand for particular fields and occupations). Differential pay by field within professions is quite common. Public Impact’s review of industry-specific surveys found that 35% to 86% offered financial incentives to recruit and retain employees.12

- Officers and enlisted members of the military undergo regular performance evaluations, and demotions for failure to meet standards result in salary reduction. Evidence from across military branches shows that flat base salaries that are not linked to performance tend not to provide sufficient incentives for performance improvement.13

- Military personnel may move up salary schedules relatively quickly; base salary has the potential to double within the first five years from $38,500 to $80,000.14

- Registered nurses’ median salaries are 25% higher than that of elementary and middle school teachers.15

Implications for Design

Linking compensation to performance depends on evaluation systems that teachers believe and that link to student impact or organizational contribution. The greater salary difference between performance levels, the more critical this accuracy and reliable implementation become. As most districts are just beginning to experiment with new compensation designs, it’s important not to overstate what we know or to lock in new compensation structures for the long-term when they may need revision. At the same time, leaders can move more quickly to eliminate or reduce step and lanes in favor of paying teachers more for taking on more challenging or leadership roles.

- Differentiated base salary has the potential to influence who enters and stays in the teaching profession.

- Much debate surrounds how to best reflect in wage comparisons the fact that teachers’ required work day and days per year are typically less than the average full-time employee in other professions. Regardless of actual hours worked, the lower contracted hours do create challenges for finding collaborative planning time and extending the student day and should be reflected in salary comparisons in some way.

- To attract and retain top-third candidates, districts must make salaries competitive. This may require raising salaries for teachers earlier in their careers.16 The amount of this raise may depend on local market dynamics.

- To compete for top-third candidates, districts should look to the entire value proposition (salary and projected earnings over time; health, retirement, and fringe benefits; professional growth opportunities; working conditions and recognition), especially if competing on salary level alone is not possible. Districts should communicate the full extent of compensation packages to potential and current teachers.
• Structures should not include financial incentives that keep low-performing individuals in the profession. To encourage low performers to leave, districts could eliminate automatic cost of living and step increases unless performance meets rigorous standards. Salary freezes for low performance ensure that the salary of a consistently low-performing teacher does not keep pace with the cost of living and may provide incentive for those individuals to leave the profession for other opportunities.

• Base salary structures should differentiate salary based on performance, with higher-performing individuals earning larger salaries than lower-performing individuals and at sufficient differentials to reflect this performance.

• Base salary structures should reflect differences in opportunities in the labor market at the outset of the career and over time. These differences will vary by labor market, but in general this applies to positions that require technical skills and knowledge such as math and science.

• Base salary structures can also differentiate salary based on responsibilities, with higher salaries demanding additional or more challenging responsibilities. This structure must be aligned with any additional salary provided for other roles. (See: What You Need to Know About: Roles and Responsibilities.)

**Essential Readings**

*This memo relied on the following, which are recommended as essential reading:*


End Notes  Base Salary for Educators


6 Ibid.


9 Ibid.


13 Ibid.


The Bottom Line

Compensation incentives used to attract and retain excellent teachers to positions that directly support the highest-priority students, such as students in schools with high concentrations of poverty or special needs students, must be of sufficient magnitude to reflect the additional degree of difficulty of the position. Financial incentives alone are unlikely to sustain an excellent teaching force at a school with a high-needs student population. To attract and retain high-performing teachers to these schools, districts must also invest in school leadership, teacher professional growth, time for teachers to plan and work together, and other factors that make the school a more desirable place to practice.

The amount of pay required to attract excellent teachers to hard-to-staff schools and subject areas depends largely on the context of the incentive and what other forms of compensation are available. Some estimates range between 15% and 50% of base salary.

Definition: A District Priority Incentive refers to extra compensation aimed at attracting teachers to more challenging positions that align with current district priorities. District Priority Incentives are generally not in the form of a permanent increase to base salary but rather a stipend or performance reward available while the teacher is serving in the specific role. District Priority Incentives are different than salary increases awarded to attract and retain those with skills and knowledge in high demand (e.g., math and science).

Current Conditions

• Schools in the lowest-income districts employ almost twice the proportion of teachers with fewer than three years of experience as higher-income schools.17

• Few districts offer sufficient financial incentives for positions that will be more difficult to staff because the conditions or nature of the job are more challenging.

• Special education is frequently cited as a critical shortage area, and teachers in this field are particularly vulnerable to job dissatisfaction and attrition.18

• The federal government’s turnaround designation has altered the landscape. It is still too early to know if the turnaround strategy, which includes both compensation incentives and improvement of working conditions, has been successful in attracting and retaining high-performing teachers to high-needs schools.

What We Know

• The amount of additional compensation needed to attract excellent teachers to hard-to-staff schools and subject areas depends largely on the difficulty of the position and what other forms of compensation are available. Some estimates of additional compensation needed range between 15% and 50% of standard base salary.19 Public Impact concluded that although no specific formula exists to determine the ideal financial incentive, comparable hard-to-staff recruitment and retention pay for teachers constitutes between $4,440 and $11,100 in addition to base salary.20 Determining the best amount and type of financial incentives, however, will require experimentation and re-adjustment.21
• Teachers who leave hard-to-staff schools are typically more effective than those who remain. Teachers who are judged to be better have greater bargaining power and tend to move toward less demanding settings. This results in less-effective educators working with the highest-need students. Traditional single “step-and-lane” salary schedules do not address these patterns of teacher sorting, and thus reinforce inequitable distributions of teachers.

• Compensation is not the only factor in attracting and retaining high-performing teachers to hard-to-staff positions. Teachers’ perceptions of their school administrators is the most important factor affecting whether or not they decide to stay at a school, trumping concerns about base salary.

• Concerns about poor working conditions and inadequate pay contribute to turnover at hard-to-staff schools and deter candidates from applying for positions. Relative to other teachers, those employed at hard-to-staff schools report lower satisfaction with school leadership, less personal empowerment, and fewer opportunities for professional development. They also report perceiving limited opportunities for career advancement.

– Both Massachusetts and North Carolina have experimented with District Priority Incentives for teachers to work in hard-to-staff schools. Massachusetts offered teachers a $20,000 signing bonus spread over four years plus accelerated certification, while North Carolina offered an annual bonus of $1,800 to math, science, and special education teachers in low-income or low-performing schools. In both cases, the nature of the incentives offered was not enough to retain teachers at these hard-to-staff schools. Researchers found that perceptions of poor working conditions and a lack of support, neither of which were meaningfully addressed under the incentive initiatives, ultimately resulted in teachers’ decisions to leave.

– In contrast, the Teach Plus T3 Initiative successfully attracts and retains high-performing teachers in low-income, low-performing schools by providing mentorship, specialized training, timely access to student data, and access to strong school leadership. Teachers in this program receive an additional $6,000 on top of base pay for the extra time they put into fulfilling their responsibilities at the school.

Cross-Sector Connections

• Compensation structures in the private sector routinely include incentives for more challenging positions in the same field.

• Service members of the military may receive “special pay” for working in unique conditions or for applying specific skills. Employment in an “imminent danger” position, for example, results in an additional $2,700 per year. Research on differentiated pay for hard-to-staff fields in the military revealed that every additional $1,000 in pay resulted in a retention increase of 0.6% to 1%.

• In the medical field, payments to physicians in underserved areas are typically matched to the
amount of incoming debt they carry, which results in additional annual payments of $10,000 to $20,000.

- Retention programs in the nursing sector include loan repayment contracts, retention bonuses, and workplace amenities such as flexible scheduling, on-site child care, and mentorship opportunities.

**Significant improvements in working conditions, including professional growth opportunities and a team of similarly highly effective teachers, will be required in addition to financial incentives.**

### Implications for Design

- Districts will likely need to offer compensation incentives to attract and retain high-performing teachers in high-need areas that align with district priorities. Districts should carefully define these areas with the understanding that financial incentives alone may not constitute the most cost-effective compensation structure, and that investments to improve working conditions such as teacher teams, creating time for teacher planning and lowering work loads, may have higher and longer-lasting payback.

- The cost of non-monetary incentives to the district should be taken into account when analyzing the cost-effectiveness of various incentive packages. Improvements in working conditions may reduce the salary differential needed to serve as an adequate incentive.

- Districts should review high-need areas annually to ensure that financial incentives are aligned with the current reality of the district’s needs and other non-monetary incentives. Because high-needs areas may shift from year to year as needs change, it is important that this incentive not be included as a permanent salary addition.

- The amount of the required incentive will depend on local factors, and districts should carry out a thorough analysis of teacher preferences prior to establishing an amount.

- Rigorous selection criteria are required to ensure both a good match between teacher and teaching assignment and that teachers taking advantage of the incentive are of sufficiently high quality.

### Essential Readings

*This memo relied on the following, which are recommended as essential reading:*


End Notes  District Priority Incentives


What You Need To Know About:

Differentiating School Roles and Responsibilities

The Bottom Line
Enabling educators to move into differentiated school roles and responsibilities helps retain excellent teachers and leverage their skills. Leverage may be accomplished through jobs that involve taking on more students or more challenging groups of students, through working with other teachers to improve teaching effectiveness, or through taking on a greater role in school or district decision-making. The concept of leverage suggests that expert teachers playing these roles often accomplish more for less, enabling increased investment in such roles. How much districts should invest in these roles—through a combination of extra compensation, release time, or other perks—should take into account the role’s economic value as well as its impact on student achievement. Roles and responsibilities should align with the district’s Instructional Theory of Action, and school designs (i.e., staffing plans and schedules) must be structured to incorporate and leverage these different roles.

Definition: School roles may take a variety of forms, but all capitalize on what Public Impact calls a “reach effect”: the increased percentage of students that excellent teachers reach in the course of their work. Possible models include:

1. Excellent teachers taking on increased class sizes.
2. Excellent teachers specializing in high-priority subjects or instructional tasks that have the greatest impact on student learning.
3. Excellent teachers taking on the highest-priority students.
4. Time-technology swaps that rely on students’ rotation between personalized digital learning and exposure to an excellent teacher.
5. Excellent teachers assuming instructional leadership roles that allow them to manage a team of other teachers.
6. Excellent teachers taking on the mentorship of novice teachers.
7. Excellent teachers taking on responsibilities that allow them to capitalize on specific content knowledge or expertise that may be non-instructional (e.g., curriculum development).
8. Excellent teachers taking on a greater role in school or district decision-making.

A combination of the above models might be considered to achieve maximum leverage.

Current Conditions
• Districts across the country have implemented specialized roles for teachers to varying degrees in the form of mentors, department heads, and team leaders. The structure of compensation varies across districts. Often, though, these
opportunities have not been fully integrated into the district’s overall career-path approach or strategies for delivering instruction and improving teaching effectiveness. Without integration, some of the challenges that arise include:

– **Lack of diversity of roles.** Contrary to the multiplicity of possibilities suggested above, in most districts, the only career path available to a teacher is the role of supporting other teachers.

– **Lack of authority and accountability.** Districts do not place teachers in positions where they are truly able to influence and be accountable for student learning.

– **Non-selectivity.** New roles are allocated based on self-nomination or seniority, rather than on teaching expertise and real competencies needed to be effective.

– **Lack of sustainability.** Not enough attention is given to how new roles can be economically sustained by reallocating resources as advancing teachers take on roles played by other teachers, specialists, or administrators.

Examples of innovative initiatives that systematically rely on compensation to attract and retain excellent teachers in school roles, and that have strong evidence of student learning gains, include:

– **Teach Plus T3 program** — This program is focused in schools where teams of highly effective teachers work together at priority schools and comprise at least one quarter of the total faculty. Over 50% of the team works with high-priority students at the school, such as those with special education needs. These teachers take on specialized roles to extend their reach in the school, receiving ongoing training and expert coaching. Additional school-level factors, such as a successful and experienced principal and timely access to student data, help these teacher teams work effectively. Each T3 teacher’s base salary is supplemented by an additional $6,000 per year in recognition of the additional time and responsibility the role requires, and they receive high recognition as well as professional development.³³

Creating opportunities for higher-leverage roles could improve retention, as cross-sector workplace research shows a positive relationship between an employee’s ability to advance within a career and personal motivation to improve the quality of his or her work.

– **Teacher Advancement Program (TAP)** — Schools implementing TAP recruit mentor teachers (earning an additional $5,000 to $12,000) and master teachers (earning $10,000 to $12,000) who support teams of teachers throughout their schools. They take on additional responsibility and authority, work an extended school year, and are held to a higher performance standard.³⁴

– **Rocketship Education** — This charter school network of seven schools in California has implemented a hybrid-learning model where students spend part of the day learning digitally in labs monitored by paraprofessionals. This frees up teachers’ time to work with students exclusively as subject specialists in one-on-one or small-group settings. This
model capitalizes on teachers’ focused areas of expertise and reaches more students with a smaller teaching staff. Rocketship consistently offers teachers above-market salaries, enhancing their ability to attract and retain effective teachers.\textsuperscript{35}

\section*{What We Know}

\begin{itemize}
\item Creating opportunities for higher-leverage roles could improve retention, as cross-sector workplace research shows a positive relationship between an employee’s ability to advance within a career and personal motivation to improve the quality of his or her work.\textsuperscript{36} What’s more, the 2006 Towers Perrin Global Workforce Study found that career advancement opportunity is one of the top drivers that attract employees in 15 out of 16 countries surveyed.\textsuperscript{37}

\item Research shows that successful teacher teaming is directly linked to higher student achievement: “Students showed higher gains in math achievement when their teachers reported frequent conversations with their peers that centered on math, and when there was a feeling of trust or closeness among teachers... Even low-ability teachers can perform as well as teachers of average ability if they have strong social capital.”\textsuperscript{38}

\item Teachers who take on roles of specialized expertise in a grade and/or subject may increase their effectiveness. Recent studies have found that elementary educators who teach both English and math are not equally effective in both subjects. If those teachers specialize in the stronger subject, they would substantially increase student achievement.\textsuperscript{39}

\item Teachers who act as effective coaches and managers of teacher teams have an important impact on student learning. Research shows that effective coaches facilitate professional collaboration and regularly inform school leaders on teacher and student progress; student outcomes improve through the course of their support to other teachers.\textsuperscript{40} Quality classroom observation-based evaluation, made possible through coaching, has also been shown to help mid-career teachers improve their instructional practice and improve student learning gains.\textsuperscript{41}

\item Accountability is central to the successful implementation of school roles. These roles should be designed to ensure that teachers who fill them meet rigorous selection criteria specific to the role. While these selection criteria will often include performance level as a teacher, in most cases teachers will need additional skill sets, such as leadership competencies, to play the leveraged role. Missouri’s Career Ladder Program, the longest standing career pathways program in the country, has taken teacher seniority and strictly observation-based evaluations into account in advancement decisions since 1987. Based on analyses of 10 years of student achievement data, a district’s participation in the program has not resulted in meaningful increases in student achievement.\textsuperscript{42} In contrast, the inclusion of student achievement data in a teacher’s eligibility for Arizona’s Career Ladder Program has resulted in significantly higher performance among participating schools.\textsuperscript{43}
\end{itemize}

\section*{Cross-Sector Connections}

\begin{itemize}
\item Career advancement in the military is rooted in specialized roles, which come with higher compensation. Base salary for a First Lieutenant, for example, is $38,500. Advancement to Captain, possible during one’s third year, increases salary to $54,100.\textsuperscript{44}

\item Specialized career pathways in nursing involve applying specific skill sets and taking on additional responsibilities. For example, a Certified
Nurse Anesthetist may earn $156,032 and a Certified Nurse Midwife may earn $91,242—both significant increases over a registered nurse’s average annual salary of $68,610.\textsuperscript{45}

**Effective school roles depend on the right person taking on additional responsibilities. Rigorous selection criteria should exist to ensure the best match between the teacher and the nature of the role.**

### Implications for Design

- School roles that emphasize instructional leadership will assist schools in creating the working conditions needed to support teacher teams and novice teachers, and will further extend the influence of excellent educators.\textsuperscript{46}

- Districts should design a variety of roles that enable teachers with diverse strengths and interests to contribute.

- Effective school roles depend on the right person taking on additional responsibilities. Rigorous selection criteria should exist to ensure the best match between the teacher and the nature of the role.

- The right amount of funding to direct toward specialized roles and responsibilities is difficult to determine because it may take several forms and vary from role to role. Teachers who take on these types of roles may be compensated with additional pay or through non-monetary means such as reduced class load.

- The total cost of all monetary and non-monetary rewards should be taken into account when determining the fiscal sustainability of the compensation structure. Ideally, new roles are designed in ways that generate enough savings to pay for their costs (e.g., by reducing the number of instructional specialists needed across a district, redirecting dollars from fall-time administrative or coaching positions, or enabling teams to employ paraprofessionals).

- Accountability for improved student outcomes should guide decisions about whether teachers maintain their advanced standing and elevated pay and whether or not to continue funding a particular school role. Rather than removing excellent teachers from accountability for individual student outcomes, roles should be designed to increase their responsibilities in return for added authority, compensation, and non-monetary rewards.

- Roles and responsibilities may be structured in a way that distributes school leadership beyond the principal and the APs, and may allow for the principal to relinquish some responsibilities so as to focus more on others. This could lead to the district refining the strengths or characteristics that it looks for in a principal.

**Essential Readings**

*This memo relied heavily on Public Impact’s research on extending the reach of excellent educators:*

Public Impact’s Opportunity Culture: [http://opportunityculture.org/reach](http://opportunityculture.org/reach)

Examples of successful implementation of specialized school roles include the following:

Teach Plus’ T3 program: [http://www.teachplus.org/page/t3-8.html](http://www.teachplus.org/page/t3-8.html)

End Notes  Differentiating School Roles and Responsibilities


The Bottom Line

Traditional bonuses, used to financially reward teachers for students’ improvements on standardized assessments, do not appear to change teachers’ behaviors, instructional practices, or improve student outcomes. Instead, public recognition and appreciation of individual teacher success with students may be more efficient for motivating and retaining excellent teachers. Evidence suggests that focus should be on incorporating increased pay for consistently strong student outcomes into base pay, and one-time rewards should be small.

Definition: A bonus is a one-time additional payment that is not incorporated into a teacher’s base salary. Its use is intended to motivate an individual, group and/or school to achieve a pre-defined goal that is either instructional (e.g., higher growth on end-of-year assessments) or non-instructional (e.g., higher attendance).

Current Conditions

Financial bonuses are more frequently being used as an incentive to teachers to increase student achievement. Bonus plans are used by both states and districts to reward individuals, teams, the entire school, or some combination of these. Current bonus plans rely primarily on student performance goals based on state assessments. Very often these bonuses are based on one-year changes in scores.

What We Know

• Limited formal evidence exists on how best to utilize performance bonuses in educator compensation.

• Research on motivation in the workplace indicates that jobs involving creativity and the exercise of judgment, such as teaching, require nuanced performance incentives. Such jobs are not well suited to traditional “carrot and stick” approaches to motivation.

• Traditional bonuses often attempted to incentivize teachers without meaningful accompanying changes in evaluation and supervision, professional development, or base salary structure. Randomized, controlled studies on these scenarios show that eligibility for a bonus does not influence teacher behavior or student outcomes.

• Even relatively large bonuses, such as those incorporated into the Metropolitan Nashville Public Schools’ Project on Incentives in Teaching (POINT), had no demonstrable effect on student performance. This incentive system included three thresholds for bonuses based on students’ value-added measures: a $5,000 bonus was available for meeting the 80th percentile, a $10,000 bonus for meeting the 85th percentile, and a $15,000 bonus for meeting the 95th percentile. Teachers perceived the thresholds as realistic, yet there was no evidence that teaching practice changed in response to the availability of these bonuses.

• Denver’s ProComp system makes one-time payments available to teachers who are successful across four general categories, including the attainment of specific knowledge or skills, positive performance evaluations, assignment in a hard-to-staff school or subject area, and individual or school-based student learning growth. Teachers whose students exceed expectations on the Colorado State Assessment Program are eligible for a 6.4% bonus, and bonuses are also available for high school-wide growth. Research on ProComp has not identified any specific links between eligibility for a bonus based on high student growth and improved student outcomes.
Cross-Sector Connections

- Examples of successful bonus incentives from the private sector typically involve production processes that are far more simplified than teaching, such as tree-planting and windshield-making.\(^5\)

- There is no evidence of the military or the nursing profession using bonuses to achieve quantifiable, measurable outputs. Typically, “bonuses” in these fields come in the form of one-time signing or recruitment bonuses and less frequently in the form of retention pay. Financial incentives are also typically tied to performance-based salary and market incentives that aim to compensate for challenging working conditions.\(^6\)

Implications for Design

- Since limited formal evidence exists on how to best use one-time bonuses in educator compensation, and some degree of experimentation will be required, school districts must rigorously evaluate programs for effectiveness and identify any unintended incentives. Plans should be designed to allow the flexibility to change with new learnings.

- Because the evidence is not conclusive and there is some disagreement over the reliability of certain performance measures, districts should be cautious in employing a bonus component as a large percentage of an individual’s potential compensation.

- If the goal of a bonus plan is to incentivize specific behaviors among teachers, districts should include those behaviors as a component of teachers’ performance evaluation, which is relied upon to determine increases in base salary.

- To incentivize specific behaviors and reward performance, districts should consider comprehensive reward and recognition programs that combine financial with other kinds of rewards and recognition.

Essential Readings

This memo relied on the following, which are recommended as essential reading:


Center for Educator Compensation Reform. “Does evidence suggest that teachers prefer one type of performance-based compensation system over another, such as group-based performance awards or individual performance awards?” Retrieved February 17, 2012 from http://cecr.ed.gov/researchSyntheses/Research%20Synthesis_Q_C14.pdf

End Notes  Bonuses, Rewards and Recognition


The Bottom Line
Redesigning compensation structures to attract, retain, and leverage highly proficient teachers also creates a critical opportunity to stop the automatic escalation of spending embedded in current compensation structures. In this time of limited resources, creating affordable systems will require redistributing the 45%–55% of district operating budgets currently devoted to teacher compensation, freeing dollars from other uses and, in some cases, raising new revenues.

Current Conditions
Most compensation structures misalign resources in three ways:

1. Overinvesting in course credits and longevity instead of contribution and results
   The recent reform literature highlights the reliance on accumulating years of experience and course credits as the main way for teachers to increase their salary levels over time. Education Resource Strategies’ analysis of 10 urban districts finds that a typical district awards more than 80% of a teacher’s potential career salary increase for adding experience and education and only about 10% of the total possible increase for taking on extra responsibilities or demonstrating strong results. Research has shown weak links between student performance and experience after a teacher’s first 3 to 5 years, and there is no evidence that additional course credits improve teaching practice, except for a slight impact in the case of high school math and science.

2. Hiding total compensation levels
   While districts routinely report average teacher salaries, they rarely include a complete picture that adjusts for required hours worked and accumulated benefits, including health, pension, and fringe. Requirements for teacher hours certainly do not represent actual hours devoted by most hard-working, conscientious teachers. They do, however, represent the hours available for instruction, team collaboration, professional development, and other important school activities. Identifying total hours covered under a district’s budget, including both instructional and non-instructional time, becomes especially important as more districts attempt to extend student hours and time for teacher growth and collaboration.

What You Need To Know About:
Creating a Financially Sustainable Compensation System

After accounting for salary increases based on years of experience and course credits, it is not surprising that most districts do not have additional funds left over to reward teachers who perform at high levels or take on additional responsibilities. Of the total dollars a typical district spends on teacher compensation, about 40% pays for starting base salary, 25% for teacher longevity, 24% on benefits, 8% for education credits, and only 3% for responsibility and results.

2. Hiding total compensation levels
   While districts routinely report average teacher salaries, they rarely include a complete picture that adjusts for required hours worked and accumulated benefits, including health, pension, and fringe. Requirements for teacher hours certainly do not represent actual hours devoted by most hard-working, conscientious teachers. They do, however, represent the hours available for instruction, team collaboration, professional development, and other important school activities. Identifying total hours covered under a district’s budget, including both instructional and non-instructional time, becomes especially important as more districts attempt to extend student hours and time for teacher growth and collaboration.

Much of the national conversation on budget shortfalls has already focused on rising healthcare and pension costs. Still, districts have an opportunity to look more carefully at whether the benefits packages they offer best align resources with improving teaching effectiveness. Teacher benefits have traditionally been
generous in comparison to private sector jobs, in part due to the perception that teachers have a lower salary scale than other professionals. But these investments may not be well spent if top-quality candidates do not value the benefits as highly as they value salary. A recent analysis of public school teachers in Illinois revealed that teachers preferred a $2 increase in current wages over a $10 increase in deferred compensation at retirement.  

Compensation systems should be flexible enough to respond to unexpected changes in available funding. This likely means that some portion of annual performance raises might depend on financial viability.

Providing cafeteria-style benefits, tailored to each employee’s needs, may be one way to better align resources. Pension benefits that are also more generous than those in the private sector are more difficult for most districts to control, but must be part of the conversation about total compensation spending and, ultimately, part of the redistribution equation.

Finally, paid leave and absences should also factor into overall compensation benefits and costs. District policies vary widely, as reported by the National Center for Teaching Quality in their TR3 database.

3. Causing automatic escalation of spending

Several less widely understood phenomena consistently drive large investments in experience and education. Annual increases in salary are automatic, regardless of a teacher’s impact or deliberate choices by school leaders. Payments for years of experience accumulate as teachers stay, and course credits leading to salary increase credits can be earned at the teacher’s initiative. Once a teacher takes enough courses to move to the next lane, she keeps this increase for the rest of her career, regardless of whether her increased knowledge serves her students or is aligned with district priorities. In many districts, teachers receive negotiated cost of living increases on top of annual step increases for experience, creating a double increase.

Implications for Design

To avoid the challenges highlighted above, compensation systems should be:

Affordable in the short and long term, including the cost of administration. This may require districts to create a transition plan that builds to the vision by focusing on the highest-leverage areas, while freeing resources from the existing compensation structure and from other categories of spending.

Flexible enough to respond to unexpected changes in available funding. This likely means that some portion of annual performance raises might depend on financial viability.

Predictable within feasible ranges, so that performance-based pay-outs and bonuses do not exceed available resources.

Justifiable long-term so that permanent increases in compensation link to rigorously defined results and proficiency, and not to temporary assignments or activities.
Finding the Money

Finding the resources to create transformative compensation structures will require a combination of redistributing current compensation spending in different ways, freeing resources from other uses and, in some cases, finding new revenue sources. How much is derived from each source will depend on each district’s specific context. The largest drivers of opportunity will likely include:

- Differences in distribution of seniority and how long and how much the district rewards extra years of service. For example, districts that have a relatively junior teaching force may find it easier to implement new structures, but they have less spending to reallocate to increased compensation over time than districts with a more senior work force.

- The ability to reallocate spending on benefits and pensions.

- The ability to leverage more effective and highly paid teachers through new delivery models. Simply framed, if schools and districts can find ways to deliver instruction with fewer teachers or through a more differentiated workforce where some are paid less for different roles, then they can afford to pay highly proficient teachers more.

- The opportunity to free resources from non-instructional spending by improving efficiency or rethinking delivery models.

End Notes Creating a Financially Sustainable Compensation System


A Compensation Glossary

Base Salary
Pay received for a given work period for a particular set of responsibilities. It does not include additional pay for overtime, extra responsibilities, or bonuses for performance. Base salary generally increases over time for each employee based on performance and labor market dynamics.

Bonus
A bonus is a one-time additional payment that is not incorporated into a teacher’s base salary. It is intended to motivate an individual, group, and/or school to achieve a predefined goal that is either instructional (e.g., higher growth on end-of-year assessments) or non-instructional (e.g., higher attendance).

Bonus Pool
The total amount of money available for bonuses is fixed, but the number of teachers eligible for bonuses is unlimited. This scenario limits individual competition and provides financial predictability; however the individual bonus amount will vary depending on the number of teachers qualifying for the reward.

Building-wide or School-wide Performance Awards
(See Group or Team Incentives)

Career Ladder or Pathways
(See School Roles and Responsibilities)

Competitive Wage
This type of wage or salary is set in relation to the opportunities that teachers or potential teachers could achieve outside of the teaching profession. It typically varies according to a teacher’s content expertise (e.g., math or science).

Deferred Compensation
The proportion of a teacher’s lifetime earnings deferred to his or her retirement.

Differentiated Pay or Differential Pay
Most often used to describe levels of compensation given to teachers based on performance, knowledge or skills, and challenge of position, including serving in hard-to-serve or hard-to-fill positions.

District Priority Incentives
A District Priority Incentive is a mechanism employed to attract high-performing teachers to more challenging positions that align with current district priorities. These incentives are intended to compensate teachers for more challenging working conditions or responsibilities. District Priority Incentives are generally not in the form of an increase to base salary but as a stipend or performance reward available while the teacher is serving in the specific role. District Priority Incentives are different than increases to base salary for in-demand skills and knowledge (e.g., math and science).

Family Wage
A wage that allows a teacher to support his or her family, taking into account local cost of living.

Fiscal Sustainability
Predictability in the amount of funding required to keep a district’s compensation structure viable and the ability of the district to implement its compensation structure over time within projected revenues.
Fixed Performance Contract
A contract stipulating that teachers meeting a pre-defined threshold of success receive a predefined reward. This minimizes competition among teachers but leaves the total amount of money required to fulfill awards unpredictable.

Group or Team Incentives
Group or team incentives, often given as a bonus, are rewards given to individual employees who are members of a larger group that achieves a specific objective or goal. Groups typically consist of teachers in a specific department, grade level, or school.

Hard-to-Staff Schools
Schools that struggle to attract and retain excellent educators, typically because of difficult working conditions. They are often located in rural or urban areas and serve low-income student populations.

Hard-to-Staff or Shortage Subject Areas
Subject areas where the demand for teacher expertise is often higher than supply; typically math, science, and special education.

Knowledge and Skills Pay
Increased pay given to teachers who acquire new skills that improve their performance; also referred to as knowledge-based pay, competency-based pay, or skill-based pay.

Organizational Transformation
A process of introducing new organizational practices—such as human resource management (HRM) practices pertaining to hiring, pay, training, job design, evaluation, information sharing, job security, and teamwork—to improve school or district performance.

Pay for Performance
Includes base salary that provides differentials contingent on performance, including but not limited to increased student performance, observable teacher performance, or increased knowledge or skills.

Performance Categories or Bands
Categories that differentiate teachers based on performance and are linked to salary levels.

Raise Pool
A fixed funding amount available for all salary increases. While the number of teachers receiving a raise is not limited, the amount of individual pay provided to each teacher varies depending on the number of teachers who qualify for raises, as well as the distribution of teachers across performance categories or bands.

Rank Order Tournament Incentive Structure
An incentive structure wherein a limited number of teachers can earn a reward, and these teachers are knowingly competing against each other. The total amount of incentive pay is fixed, allowing for greater predictability.

Retention Pay
Significant one-time pay increases at specific points in a teacher’s career, designed to retain higher performers.

School-based Performance Awards
See Group or Team Incentives
School Roles and Responsibilities
School roles may take a variety of forms, but all capitalize on what Public Impact calls a “reach effect”: the increased percentage of students that excellent teachers reach in the course of their work.

Single Salary Schedule
A salary grid with lanes that reward advanced education and training and steps that reward years of experience. The single salary schedule does not differentiate salary among teachers in any other way, including performance, roles, and responsibilities.

Teacher Incentives or Incentive Pay
Another general term for providing teachers with additional compensation beyond the traditional single salary schedule. Incentive pay can be based on a variety of indicators and is often used as a tool to recruit teachers for particular schools or subject areas.

Information about the above terms was adapted from a variety of sources, including:

Center for Educator Compensation Reform: http://cecr.ed.gov/compensation/


Public Impact: http://opportunityculture.org/reach