

Offices of Research and Education Accountability

TENNESSEE COMPTROLLER OF THE TREASURY, JUSTIN P. WILSON

Legislative Brief

Teacher Compensation

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Overview

Historically, teacher compensation systems have been based on straightforward criteria such as years of experience and degrees earned. In recent years, however, states and districts have broadened the discussion around compensation as part of a teacher-centered approach to improving student achievement. A comprehensive initiative would include differentiated pay as a reward for effective teachers or for teachers who agree to teach in hard-to-staff schools or subjects.

Exhibit 1 provides an overview of teacher compensation models. Most of the states and districts that have experimented with teacher incentive plans combine aspects of several or all of the models below to form a new compensation system.

This legislative brief is an accompanying document to the Office of Education Accountability's policy history *Teacher Compensation in Tennessee*.

Exhibit 1: Teacher Compensation Models

Description

Single Salary

Single salary models are based on scheduled pay steps that compensate teachers based on their years of experience and education.

 Attempts to ensure pay equity based on teacher experience and education

Purpose

Merit-Based or Performance-Based (Pay-for-Performance)

Merit-based models provide bonuses or pay increases to teachers based on improvements in student achievement and teachers' records of success.

- Rewards effective teachers those who raise student achievement – by paying them more
- Seeks to retain and recruit effective teachers

Knowledge- and Skill-Based

These models link teacher pay to professional development by rewarding teachers for taking classes and learning new skills that (presumably) will make them better teachers.

- Rewards teachers for doing more professional development
- Seeks to retain and recruit motivated (and presumably effective) teachers

Hard-to-staff Subject- and School-Based

These models offer incentives to teach hard-tostaff subjects or in hard-to-staff schools; incentives range from one-time bonuses to supplemental salary to housing options.

- Seeks to recruit teachers for specific, potentially unattractive positions
- Seeks to retain teachers by recognizing that some teachers have more challenging situations than others

Differentiated Pay Models

Sources: Michael J. Podgursky and Matthew G. Springer, "Teacher Performance Pay: A Review," Policy Retrospectives, Journal of Policy Analysis and Management, Vol. 26, No. 4, pp. 909-949 (2007); Jennifer Azordegan, et al., Education Commission of the States, Issue Paper, "Diversifying Teacher Compensation," Dec. 2005.

Teachers in most states and districts are paid less than their peers in comparable professions.

Tennessee, along with the majority of southern states, pays teachers less than 90 cents for every dollar earned in a comparable profession (such as accounting, counseling, and human resources). As Exhibit 2 illustrates, only 10 states pay teachers the same as or more than employees in comparable professions.

The teaching profession also lags behind other professions' salary growth. An American Federation of Teachers report on teacher pay shows that the average attorney in 1995 was paid roughly \$83,000. The average attorney in 2005 received just over \$100,000 – an increase of 21.17 percent. Teachers, on the other hand, received an average of \$47,115 in 1995 and \$47,602 in 2005 – an increase of 1.03 percent.² While the wage gap is not explained solely by gender, consideration should be given to this issue relative to women's career opportunities over time. An Economic Policy Institute report explains that "the pay gap between female public school teachers and comparably educated women" in other professions has changed dramatically in the last four decades. In 1960,

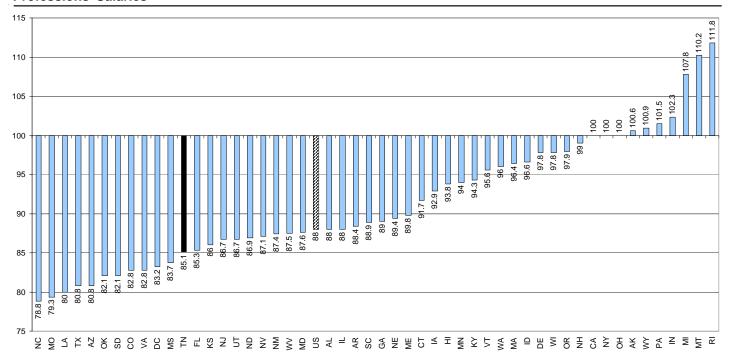
female teachers had a wage advantage over their female professional peers of 14.7 percent. By 2000, however, the relationship had reversed and female teachers were working at a wage disadvantage of 13.2 percent.³

Tennessee's Teacher Salaries

Using 2004-05 data, states' average teacher salaries range from roughly \$34,000 in South Dakota to almost \$58,000 in Connecticut.⁴ Tennessee has the 29th highest average (\$42,076).⁵ Southern states traditionally have had lower teacher salary averages than other regions of the country and lower wages for other professions as well.⁶ Using 2005-06 salary data, the Southern Regional Education Board (SREB) ranks Tennessee ninth out of the 16 SREB states in teacher salary. (See Exhibit 3.)

Tennessee Average Teacher Salaries
In 2006-07, the average teacher salary in
Tennessee was \$43,815, according to the
Tennessee Education Association. That year,
Oak Ridge City had the highest average
teacher salary at \$55,095, and Alamo City had
the lowest at \$36,812. Source: TEA website.

Exhibit 2: Teacher Salaries in the 50 States, DC, and the U.S. in Relationship to Comparable Professions' Salaries⁷



Source: "Tennessee: A Special Supplement to Education Week's Quality Counts 2008," p. 11.

Tennessee has seen a larger increase in average teacher salaries over the last decade than most states in the nation; most other southern states had significant increases in teacher salaries during this period as well. The state ranks 14th nationally by percentage change in salary (up five percent) since 1994-95.8

The Tennessee Department of Education releases a teacher salary schedule annually, which sets licensed instructional personnel minimum salaries. However, districts can – and almost always do – pay teachers above this minimum. The salary schedule is based on years of experience and levels of education and includes various pay steps as a teacher gains more of either. The minimum salary that a teacher can be paid in Tennessee - with no years of college and no teaching experience - is \$22,645.9 If a teacher has 20 years of teaching and a doctorate degree, he/she cannot be paid less than \$51,955 as required by the state salary schedule. 10 As mentioned previously, however, most districts pay above these salary minimums.

Though teachers typically receive better benefit packages than their peers in comparable professions, teacher benefits have not grown enough over the last decade to compensate for low teacher salaries. According to an Economic Policy Institute (EPI) study, teachers earn 15 percent lower pay per week than comparable employees, and the wage disadvantage has been particularly significant for women.11 However, the report also shows that teachers' non-wage benefits, like insurance and pension, "partially offset these wage differences." 12 A 2007 report finds that teacher benefits account for 9.1 percent of compensation compared to just six percent for other professionals.¹³ Using a more conservative methodology, EPI estimates that teacher benefits make up 7.7 percent of teacher wages compared to six

"Policies that solely focus on changing the composition of the current compensation levels, such as merit or pay-for-performance schemes, are unlikely to be effective unless they also correct the teacher compensation disadvantage in the labor market."

Source: EPI Study, 2008.

Exhibit 3: Average Teacher Salaries in SREB States, 2005-06

Maryland	\$54,486
Delaware	\$54,264
Georgia	\$48,300
North Carolina	\$43,922
Virginia	\$43,823
Florida	\$43,302
South Carolina	\$43,242
Arkansas	\$42,931
Tennessee	\$42,537
Kentucky	\$41,903
Texas	\$41,744
Mississippi	\$40,594
Alabama	\$40,347
Louisiana	\$40,253
Oklahoma	\$38,772
West Virginia	\$38,284
Region Average	\$43,417

Source: Gale F. Gaines, Focus on Teacher Pay and Incentives: Recent Legislative Actions and Update on Salary Averages, Southern Regional Education Board, May 2007.

percent for other professions. The EPI study explains that employers contribute larger percentages of total compensation to health and pension benefits in the teaching field than in other professions.14 Economist Michael Podgursky, who disagrees with much of the EPI study, argues that "public school teachers are almost all covered by defined benefit teacher retirement systems that are very generous."15

Though most teachers across the country receive better benefits packages than their peers in comparable fields, teacher benefits have not continued to rise in value over the years. EPI reports that nationally teacher benefits have risen an estimated one percent since 1994, while overall teacher compensation has eroded by 11.7 percent since 1993. The report explains that "it is appropriate to say there was an erosion of relative compensation of between 10 and 11 percentage points."16

Tennessee's Teacher Benefits

In 2001, SREB published a report titled Beyond Salaries: Employee Benefits for Teachers in the SREB States. The report found that employer contributions to teacher retirement plans in Tennessee made up 3.7

percent of a teacher's compensation—the lowest contribution in southern states. Louisiana employers had the highest contribution to teacher retirement plans at 14 percent; the average employer contribution in SREB states was around nine percent.¹⁷

Teacher salaries are not typically based on teacher performance. The traditional single salary schedule of the majority of school districts pays teachers based on two objective criteria: training and years of experience. Training is usually defined as postsecondary coursework and degrees. Because performance is not a factor, some potentially effective teachers may choose more financially appealing professions outside of teaching. Basing its conclusions on work by education researcher Eric Hanushek, the Center for American Progress argues that:

Simply put, pay systems in public education do not typically recognize the labor market realities that some teachers will have more competing and financially attractive opportunities outside of teaching than others.¹⁸

Citing researchers Caroline Hoxby and Andrew Leigh, the Center for American Progress argues that increased wage compression in teaching – the idea that the lowest and highest teacher salaries are both

closer to the average salary than those found in other professions – has weakened the field:

Teaching [has become] an increasingly financially attractive occupation for lower-aptitude individuals whose compensation (in teaching) tends to be dragged upward toward the mean, and a less financially attractive occupation to those with higher aptitude whose compensation tends to be dragged downward toward the mean.¹⁹

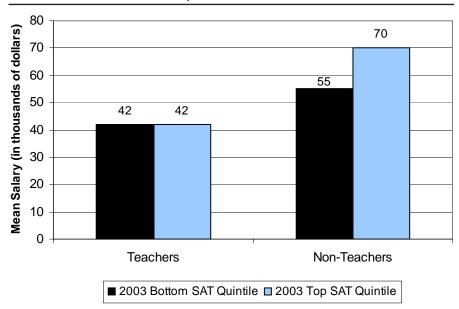
Exhibit 4 shows the spike in salaries for non-teachers with good SAT scores compared to equal teacher salaries for bottom and top SAT performers.

Several states and districts have experimented with differentiated pay plans in an effort to recruit new teachers and keep existing ones. However, research is sparse on whether differentiated pay by itself actually improves teaching quality.²⁰ States and districts are more likely to achieve their desired outcomes, whether recruitment, retention, or improved student achievement, when combining differentiated pay with other teaching quality initiatives.

The term "differentiated pay" refers to any additional payment beyond the typical single salary schedule. Differentiated pay can come in various forms:

- merit-based pay or pay-for-performance, which rewards teachers based on student achievement gains
- skills- or knowledge-based pay, which rewards teachers for engaging in specific professional development activities
- hard-to-staff subject- and school-based pay, which rewards teachers for teaching specific subjects (most often math or science) or for teaching in a particularly challenging school.

Exhibit 4: Mean Salaries for Teachers and Non-teachers by Top and Bottom SAT Score Quintiles, 2003



Source: Dan Goldhaber, "Teacher Pay Reforms: The Political Implications of Recent Research," Center for American Progress, December 2006, p. 9.

States and districts develop differentiated pay plans for two main reasons:

- To serve as an incentive for effective teachers. The purpose of the incentive in this case is to attract high-performing individuals to the profession with the promise of merit/skill-based compensation. This is also applicable to retention of existing teachers who fit this category.
- To recruit potential teachers in shortage areas. The purpose of the incentive in this case is to recruit those individuals with expertise in subjects for which there are significant teacher shortages, e.g., math and science. This incentive can also aid recruitment for hard-tostaff schools.

The National Commission on Teaching and America's Future forecasts a serious teacher shortage problem over the next 10 years, suggesting that the country "will lose 2 million of the nation's 3.4 million teachers, mostly through attrition, not retirement."²¹ Education researcher Richard Ingersoll examined why teachers were leaving the profession. Using controls for differences in background characteristics, Ingersoll

reports that 61 percent of teachers who leave the profession because of dissatisfaction do so because of "poor salary." (See Exhibit 5.)

Most traditional teacher compensation models do not take into account the fact that some teachers face tougher classroom challenges than others, and differentiated pay is one way states and districts can acknowledge this. An Education Commission of the States examination of teacher perceptions of the work environment in hard-to-staff schools explains:

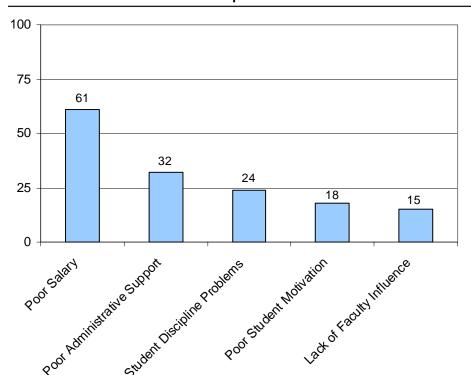
Hard-to-staff schools differ from their peers in several respects. Their students differ in terms of performance on end-of-grade tests, ethnicity and wealth. Hard-to-staff schools are more likely to be located in urban areas and less likely to be located in rural areas than other schools. They also are more likely to be middle schools, less likely to be elementary schools and equally likely to be located in suburban areas or to have high school grade ranges.²²

Many of these characteristics dissuade some teachers from accepting positions in hard-to-staff schools, which

creates a shortage of qualified applicants.

In addition, some areas of the

Exhibit 5: Percent of Teachers Who Left the Profession Because of Dissatisfaction and Reasons for Departure



country face a shortage in teachers for specific subjects. Hard-to-staff subject areas vary from state to state, but a national list of states' teacher shortage areas indicates that many states struggle to find enough qualified special education, middle and high school math and science, and English as a Second Language instructors. In 2007-08, Tennessee reported teacher shortages in these four areas.²³

Source: Richard M. Ingersoll, "Is There Really a Teacher Shortage," Center for the Study of Teaching and Policy and the Consortium for Policy Research in Education, Sept. 2003.

Tennessee's Differentiated Pay Plans

In 2007, the Tennessee General Assembly passed a law requiring districts to establish differentiated pay plans and to submit the plans to the Department of Education prior to the 2008-09 school year.²⁴ The law explains that all school districts must "develop, adopt and implement a differentiated pay plan...to aid in staffing hard to staff subject areas and schools and in hiring and retaining highly qualified teachers."25 Public Chapter 376 also required the State Board of Education to establish guidelines for LEAs to use in developing differentiated pay plans. The guidelines require the Department to review and approve districts' differentiated pay plans only if funding for the plans is "budgeted, continual and approved in advance by the local board of education." 26 However,

plans."^{27,28}

The majority of the differentiated pay plans (82 of 136 plans) focus on providing bonuses for teachers and administrators in hard-to-staff positions.²⁹ Exhibit 6 summarizes the key components of the

according to the Tennessee School Boards Association, some districts do not have adequate funds to implement differentiated

pay plans, and "the Department [of Education] has allowed plans to be submitted and not budgeted since some systems did not receive sufficient BEP 2.0 funds. Others are using existing resources or new money from BEP 2.0 to pay for the

The concept of differentiated pay has been under consideration for several decades. Tennessee's experiment with differentiated pay in its Career Ladder program through the 1980s and 1990s was not sufficiently documented to show an effect on teacher quality. Differentiated pay by itself may not be enough to significantly impact teaching quality, recruitment efforts, or teacher retention. Most states and districts that have seen promising results from differentiated pay plans have incorporated differentiated pay into broader teaching

quality initiatives. Following are overviews of two particularly successful teaching quality programs in Tennessee, both of which incorporate differentiated pay.

Hamilton County's Benwood Initiative

Hamilton County has been nationally recognized as having an effective teacher-centered approach to improving student achievement. A key aspect of the initiative includes a financial incentives program for teachers in Benwood schools – inner-city schools with histories of low performance targeted with

Exhibit 6: Components Present in Districts' Differentiated Pay Plans and Number of Plans with those Components*

Plan Component	Number of Plans that Include this Component
Bonus for high-need teachers or administrators	82
Tuition reimbursement for endorsements in high-need areas	48
Bonus for National Board Certification	47
Testing fees reimbursed for endorsements in high-need areas	22
Bonus for student achievement gains	9
Class size reductions	8
Bonus for obtaining additional degrees	5
Bonus for professional development	5
Additional personal days for fulfilling specific requirements	4
Bonus for obtaining tenure	4
Substitute provided for out-of-class experience	3
Bonus for mentoring other teachers	3
Bonus for perfect attendance	2
Student loan forgiveness	2
Bonus for recruiting other teachers	1
Tuition reimbursement for highly qualified teachers	1
Bonus for teachers who relocate to district	1
Tuition reimbursement for teachers obtaining Master's or taking higher level courses	1

^{*}Total of 136 plans; plans may contain more than one component. Source: Tennessee Department of Education, "Differentiated Pay Plans," Received from Wesley Robertson.

plans.

Chattanooga's Benwood Foundation funding. Teachers in Benwood schools qualify for financial incentives including:

- Retention and Recruitment Bonuses Existing and recruited teachers with records of high performance receive annual salary bonuses of \$5,000 for three years.
- Salary Bonus Principals in Benwood schools whose students have demonstrated high performance qualify for \$10,000 salary bonuses.
- Team Bonus If any of the eligible schools achieves an average minimum Tennessee Value-Added Assessment System (TVAAS) score of 115, each teacher will receive a salary bonus of \$1,000. If schools achieve an average score of 120 or higher, each receives a salary bonus of \$2,000.
- 4. Housing Incentive Through the Chattanooga Teacher Next Door Program, teachers can buy homes in nine downtown neighborhoods and receive a loan of up to \$10,000. The loan is forgiven if they live in the homes for five years. Teachers are also eligible for a second mortgage (up to \$20,000) to be used for down payments and closing costs.³⁰

Former Hamilton County Superintendent Jesse Register explained that this initiative, developed and promoted by then-Mayor Bob Corker, "sent a strong signal to the entire community that these weren't second-class teaching jobs, that we valued these schools and these teachers."³¹ In addition, proponents of the Benwood initiative sought out union support. The local teachers' union

...was an active participant in creating this plan, and did much to engage and educate its members about the changes being contemplated.

Ultimately, the [local union] went against typical union positions and agreed to allow faculty at struggling schools to be reconstituted, and

bonuses to be paid to teachers to attract and retain teachers at those schools.³²

Benwood schools have been successful at increasing student reading and math achievement, improving teacher retention, and achieving No Child Left Behind highly qualified teacher status. In the five years since the program began, reading levels for 3rd grade students in Benwood schools have increased from 53.1 percent to 80.2 percent, significantly narrowing the gap between Benwood Schools and other Hamilton County Schools. The plan also helped retain teachers. In 2003, Benwood schools had 68 newly-filled staff positions. By 2007, only 28 positions were newly-filled, indicating that fewer teachers were leaving.³³

Teacher Advancement Program (TAP)

Originally developed by the Milken Family Foundation and now headed by the National Institute for Excellence in Teaching, the Teacher Advancement Program (TAP) aims to recruit and retain more high quality teachers by providing opportunities to earn more money and develop more skills while in the classroom. School districts in 13 states, including Tennessee's Knox County, operate TAP, which includes four key components:

- Multiple Career Paths TAP includes master and mentor teacher positions, which require more skill and more peer group involvement, and which have higher salaries than regular career teacher positions. TAP allows teachers to advance in their careers while remaining in the classroom; previously, teachers could attain higher salaries only through moving into administrative positions.
- Ongoing, Applied Professional Growth TAP requires school schedules to include regular times for teachers to meet, mentor, plan, and discuss with each other.
- Instructionally Focused Accountability TAP
 teacher evaluation is based on TAP Teaching
 Skills, Knowledge, and Responsibility
 Standards and on the academic growth of their
 students.

 Performance-Based Compensation – TAP bases teacher salaries on teachers' roles and responsibilities, evaluations, and student achievement.³⁴

Knox County began piloting TAP in January 2007 to address teacher retention issues and offer alternative professional development opportunities. Four schools in Knox County – Lonsdale Elementary, Pond Gap Elementary, Holston Middle, and Northwest Middle – use the Teacher Advancement Program. The district's 2007-08 TAP budget was \$1,913,990.³⁵ An interview with the Human Resources Director for Knox County Schools indicates that TAP has been effective at retaining teachers in hard-to-staff schools, and test scores have gone up in all of the TAP schools.³⁶

Policy Considerations

A further policy discussion of teacher quality initiatives might explore integrating differentiated pay with teacher supports such as teacher induction programs, mentoring, and professional development.

Tennessee has required districts to establish differentiated pay plans through Public Chapter 376 (2007). However, differentiated pay is more likely to increase student achievement and teaching quality when it is combined with other teacher supports. The Benwood Initiative (Hamilton County) and the Teacher Advancement Program (Knox County) have been successful in improving teaching quality (and student achievement) in part because they have combined additional pay with professional development and teacher support.

One element of a broader teacher quality initiative – a strong induction program for new teachers – has been shown to be particularly effective. The State Department of Education and the State Board of Education have taken steps to develop sample induction programs, and many states have strong models that could be replicated in Tennessee.

Further study of this issue might include:

- An evaluation of the implementation and effects-to-date of the differentiated pay legislation,
- A descriptive inventory of and implementation status report on teacher induction and mentoring initiatives in Tennessee, and
- An analysis of the effectiveness of existing initiatives in reducing new teacher turnover and improving teacher quality.

Resources for Policymakers

"Teacher Evaluation in Diversified Teacher
Compensation Systems," Angela Baber, Education
Commission of the States, June 2007
http://www.ecs.org

"Student Performance Assessment in Diversified
Teacher Compensation Systems," Jeanne Kaufmann,
Education Commission of the States, June 2007
http://www.ecs.org

"The Use of Diversified Compensation Systems to Address Equitable Teacher Distribution," Anne Martin, Education Commission of the States, June 2007 http://www.ecs.org

"Funding Diversified Teacher Compensation Systems,"
Christine Palumbo, Education Commission of the
States, June 2007
http://www.ecs.org

"Creating a Successful Performance Compensation
System for Educators," National Institute for Excellence
in Teaching, July 2007
http://www.talentedteachers.org

Teacher Advancement Program, National Institute for Excellence in Teaching http://www.talentedteachers.org

Hamilton County's Benwood Initiative http://www.pefchattanooga.org

Endnotes

- Education Week, "<u>Tennessee: A Special Supplement to Education Week's Quality Counts 2008</u>," p. 11. Accessed Jan. 11, 2009, at http://www.edweek.org.
- ² American Federation of Teachers, "<u>Survey and Analysis of Teacher Salary Trends 2005</u>," p. 4, (all amounts are estimated in 2005 dollars). Accessed Jan. 15, 2009, at http://www.aft.org.
- ³ Sylvia A. Allegretto, Sean P. Corcoran, and Lawrence Mishel, <u>The Teaching Penalty</u>, Economic Policy Institute, Mar. 2008, p. 2. Accessed Feb. 15, 2009, at http://www.epi.org.
- ⁴ American Federation of Teachers, "<u>Survey and Analysis of Teacher Salary Trends 2005</u>," p. 23.
- ⁵ Ibid., Tennessee's average salary includes extra-duty pay, which is not necessarily included in other states' averages.
- ⁶ U.S. Bureau of Labor Statistics, National Compensation Survey, Occupational Wages in the Nine Census Divisions, 2007.
- Teducation Week's analysis is based on How Does Teacher Pay Compare? Methodological Challenges and Answers, by Sylvia A. Allegretto, Sean P. Corcoran, and Lawrence Mishel, Economic Policy Institute, 2004, which uses "hourly compensation and benefits data for teachers and professionals to estimate the extent of any 'fringe benefit bias' that exists when comparisons of teacher wages are made without considering benefits, which frequently differ across professions," p. 2.
- 8 American Federation of Teachers, "<u>Survey and Analysis of Teacher Salary Trends 2005</u>," p. 26.
- The salary schedule still includes a step for teachers without college experience for those already teaching prior to 1980 without a degree; E-mail from Wesley Robertson to Vance Rugaard, Tennessee Department of Education, "Re: Fwd: Quick question about teacher salary schedule...," Dec. 2, 2008; Tennessee State Board of Education Agenda, Final Reading, "Basic Education Program Salary Schedule for Licensed Personnel and State Mandated Minimum Salary Schedule for Superintendents/Directors of School for Fiscal Year 2008-09," Aug. 22, 2008.

- Tennessee State Board of Education Agenda, Final Reading, "Basic Education Program Salary Schedule for Licensed Personnel and State Mandated Minimum Salary Schedule for Superintendents/Directors of School for Fiscal Year 2008-09," Aug. 22, 2008.
- ¹¹ Allegretto, Corcoran, and Mishel, *The Teaching Penalty*, p. 2.
- ¹³ Marguerite Roza, "<u>Frozen Assets: Rethinking Teacher Contracts Could Free Billions for School Reform</u>," Education Sector Reports, Jan. 2007, p. 6. Accessed Feb. 6, 2009, at http://www.educationsector.org.
- ¹⁴ Allegretto, Corcoran, and Mishel, *The Teaching Penalty*, p. 32.
- National Council on Teacher Quality, "NCTQ Square-Off: Are Teachers Underpaid? Two economists tackle an intractable controversy," Jul. 2005. Accessed Jan. 15, 2009, at http://www.nctq.org
- ¹⁶ Allegretto, Corcoran, and Mishel, <u>The Teaching Penalty</u>, pp. 34-35.
- ¹⁷ Southern Regional Education Board, <u>Beyond Salaries: Employee Benefits for Teachers in the SREB States</u>, (no date). Accessed Feb. 10, 2009, at http://www.sreb.org.
- Dan Goldhaber, <u>Teacher Pay Reforms: The Political Implications of Recent Research</u>, Center for American Progress, Dec. 2006, p. 6. Accessed Feb. 10, 2009, at http://www.cde.state.co.us.
- ¹⁹ Ibid, p. 10.
- ²⁰ Michael J. Podgursky and Matthew G. Springer, <u>Teacher Performance Pay: A Review</u>, National Center on Performance Incentives, Vanderbilt Peabody College, p. 32. Accessed Feb. 11, 2009, at http://www.missouri.edu/.
- ²¹ Michelle Exstrom, "<u>Top Pay for Top Teachers</u>," *State Legislatures*, Sept. 2006. Accessed Feb. 2, 2009, at http://www.ncsl.org.

- ²² Elizabeth Glennie, Center for Children and Family Policy, Terry Sanford Institute for Public Policy, Duke University; and Charles R. Coble and Michael Allen, Education Commission of the States, "Teacher Perceptions of the Work Environment in Hardto-Staff Schools," Education Commission of the States, Nov. 2004, p. 16. Accessed Dec. 22, 2008, at http://www.ecs.org.
- ²³ U.S. Department of Education, Office of Postsecondary Education, Policy and Budget Development Staff, "<u>Teacher</u> <u>Shortage Areas Nationwide Listing 1990-91 through 2007-08</u>," Mar. 2008. Accessed Feb. 2, 2009, at http://www.ed.gov.
- ²⁴ Public Chapter 376 (2007).
- ²⁵ Ibid.
- ²⁶ Tennessee State Board of Education, "Guidelines for Differentiated Pay Plans, Public Chapter 376," Agenda, Final Reading, Dec. 19, 2007.
- ²⁷ E-mail to the author from Tammy Grissom, Executive Director, Tennessee School Boards Association, "RE: Question about differentiated pay," Sept. 18, 2008.
- ²⁸ The Basic Education Program (BEP) is the state's funding formula for public education. The BEP formula includes both a state contribution share and a local share. In 2007 the BEP was reformulated (as BEP 2.0) and resulted in additional funds for most districts.
- ²⁹ Tennessee Department of Education, "Differentiated Pay Plans," Received from Wesley Robertson.

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- ³¹ Elena Silva, "<u>The Benwood Plan: A Lesson in Comprehensive Teacher Reform</u>," Education Sector Reports, Apr. 2008, p. 3. Accessed Feb. 2, 2009, at http://www.educationsector.org.
- ³² Public Education Foundation, "<u>Lessons Learned: A Report on the Benwood Initiative</u>." Accessed Feb. 3, 2009, at http://www.pefchattanooga.org.
- 33 Silva, "The Benwood Plan"; Partners for Strong Schools, "The Benwood Initiative: Results." Accessed Feb. 3, 2009, at http://pefchattanooga.org.
- ³⁴ Jennifer Azordegan, Patrick Byrnett, Kelsey Campbell, Josh Greenman, and Tricia Coulter, Issue Paper, "<u>Diversifying Teacher Compensation</u>," Education Commission of the States, Dec. 2005. Accessed Feb. 3, 2009, at http://www.ecs.org; National Institute for Excellence in Teaching website, http://www.talentedteachers.org.
- ³⁵ E-mail to Joseph Woodson, OREA Associate Legislative Research Analyst, from Monty Howell, Supervisor/Negotiations/ TAP Director, Human Resources Department, Knox County School System, "TAP Info," Aug. 15, 2008.
- ³⁶ Telephone interviews with Monty Howell, Human Resources Director, Knox County Schools, Aug. 8, 2008, and Aug. 15, 2008.





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