Public Opinion on Merit Pay:
Self Interest vs. Symbolic Politics

William G. Howell        Michael Henderson
University of Chicago     Harvard University

PEPG 10-05

Prepared for the PEPG Conference
Merit Pay: Will It Work? Is It Politically Viable?

Harvard Kennedy School
Cambridge, Massachusetts
June 3-4, 2010
Political science has long privileged the general over the specific. Politics, in this view, is principally about partisan rivalries; about broad principles such as equality and individualism; and embedded within these partisan attachments and principles, competing notions of the good life, the appropriate role of government, conceptions of fairness, and the like. Self interests, for the most part, are excluded from this formulation, for rarely does politics validate bald assertions of one’s own material welfare. And even when it does, political scientists have long argued, the influence of self-interests pales in comparison to individuals’ long-standing political dispositions, sometimes referred to as “symbolic politics.”

To say that self-interests are less important than things like party identification or ideological commitments, however, is not to say that they are unimportant. Indeed, a growing literature suggests that when stakes are high and outcomes are clear, self-interests can meaningfully inform people’s policy preferences. Debates about teacher evaluations, job security, and compensation, we suggest, meet such criteria. Merit pay initiatives transparently alter the teaching profession and goings-on within classrooms, and thereby promise to stoke the self-interests of the two most prominent stakeholders in public education: teachers and parents.

This memo summarizes our ongoing efforts to empirically evaluate the extent to which public debates about merit pay pit key stakeholders, rather than well-defined political constituencies, against one another. We examine the content of public opinion on these issues; the willingness of different groups to update their views in light of new information; and the ways in which expressed opinions on these policies figure into the larger assembly of education policies. When it comes to public debates about merit pay, we find, cleavages between parents and teachers are not merely evident. They utterly overwhelm those differences observed between either Democrats and Republicans or liberals and conservatives.

The 2009 Education Next-PEPG Survey

We use the 2009 Education Next-Program on Education Policy and Governance (PEPG) Survey conducted by Knowledge Networks®. The survey was fielded to a stratified nationally representative sample of 3,251 adults, including an oversample of 709 teachers. The sample also includes 863 parents with children under the age of 18. Samples were drawn from the probability-based KnowledgePanel®, and surveys were administered over the internet between February 25 and March 13, 2009.¹

¹ The KnowledgePanel® panel members are chosen via a probability-based sampling method and using known published sampling frames that cover 99% of the U.S. population. Sampled non-internet households are provided a laptop computer or MSN TV unit and free internet service. Because Knowledge Networks® offers members of its panel free Internet access and a WebTV device that connects to a telephone and television, the sample is not limited to current computer owners or users with Internet access.
The survey includes a wide range of education policy questions about school spending, vouchers, charter schools, accountability, and teacher pay. Three questions about teacher compensation and job security are analyzed here. They are:

- **Merit pay**: “Do you favor or oppose basing a teacher’s salary, in part, on his or her students’ academic progress on state tests?”

- **Merit tenure**: “Another proposal has been made that would require teachers to demonstrate that their students are making adequate progress on state tests in order to receive tenure. Would you favor or oppose such a proposal?”

- **Teacher pay**: “Do you think that teacher salaries in your state should increase, decrease, or stay about the same?”

**Summary Statistics**

Tables 1-3 display the distributions of public opinion on merit pay, merit tenure, and teacher pay respectively. Responses are then disaggregated by party affiliation, parental status, and teacher status.

All of these policy initiatives receive widespread public support. A plurality of Americans believe that teacher pay should depend, in part, on their students’ performance on standardized tests. And a majority of Americans think that only those teachers who demonstrate that their students are making adequate progress on state tests should be granted tenure. These responses, however, do not indicate general hostility toward teachers. Quite the contrary, a majority of Americans also believe that teacher salaries should be increased.

Partisanship does not weigh heavily on people’s assessments of merit pay and merit tenure. Although Republicans favor merit pay somewhat more than Democrats, the differences are minor: whereas 48 percent of Republicans support merit pay, so do 41 percent of Democrats. The differences on merit tenure are even smaller. In contrast, teachers look strikingly different from parents and, to a lesser extent, from the public at large. Three-fourths of teachers oppose merit pay, but a majority of parents favor tying teacher compensation to student performance on standardized tests. On merit tenure, disagreements between teachers and parents appear equally large.

When it comes to teacher salaries, partisan divisions surface, just as differences between teachers and parents moderate. A majority of Democrats, as compared to just a plurality of Republicans, want to raise salaries. Not surprisingly, though, teachers express the highest levels of support for increasing teacher salaries. And on this issue, unlike merit pay and merit tenure, teachers do not confront an assembly of parents who are hostile to their views.

**Multivariate Models**

---

2 For merit pay and teacher pay, the tables include only those respondents receiving the baseline condition (i.e. no additional information about endorsements or average teacher salaries) in the experiments described below.

3 For party affiliation respondents who ‘lean’ toward one party or the other are grouped with those who identify with that party.
The descriptive statistics suggest that self-interest shapes attitudes on merit pay and merit tenure to a greater extent than do general predispositions such as party identification. We investigate these relationships more directly with a series of regression models presented in Tables 4-6. For each model attitudes are rescaled to range from -1 to 1, with higher values indicating greater support for merit pay, merit tenure, or increasing teacher salaries. These attitudes are regressed on indicators for key stakeholder groups, general political predispositions, and a series of controls capturing demographic, contextual, and question wording differences.

As stakeholders, we continue to identify teachers and parents, but also consider homeowners. The relevance of merit pay initiatives for teachers is plain and obvious. And to the extent that merit pay changes goings-on within the classroom, parents too have a vested interest in the policy. But we do not want to rule out the possibility that merit pay also implicates homeowners. Homeowners not only bear a greater share of the cost of school funding in most areas, they also stand to benefit, through their property values, from improvements in the quality of local schools. The relevance of political predispositions, meanwhile, is tested with separate indicator variables for party identification and ideology.

The regression results conform to the pattern of summary statistics. General political predispositions do not go far in predicting attitudes toward merit pay and merit tenure. Parental and teacher status do. In both cases, teachers express greater opposition and parents greater support. For increasing teacher pay, general predispositions come back into play, with Republicans and conservatives expressing less support than Democrats or liberals. But self-interest remains influential here as well, at least for teachers who are more supportive of pay raises. With the exception of merit tenure, homeownership has little relation to public support for any of these policy reforms. And besides African Americans and Hispanics, both of whom demonstrate especially high levels of support for all of these teacher compensation and tenure reforms, none of the demographic or contextual control variables demonstrate consistently significant effects across the various regressions.

**Updating Opinions**

As it does in most policy domains, the public exhibits profound levels of ignorance about public education. Previous Education Next-PEPG surveys have revealed, for instance, that the public does not know even the most basic facts about per-pupil expenditures, teacher salaries, or charter schools. Rather than confine our inquiry to the expressed views of either the public as a whole or key subgroups at any point in time, therefore, we also investigate how these views change when simple information about policy items is presented, giving us some indication for how these opinions might change after informed debate.

Both of the teacher compensation items featured experimental variations in wording. For the merit pay item, respondents were randomly assigned to one of three conditions: one group of respondents was asked its views outright; another was told that President Obama supports the proposal, and then asked its views; and a third group was told that recent research indicates merit pay boosts student achievement, and then asked its opinion. For the teacher pay item, respondents were randomly assigned to one of two
conditions: the first was simply asked its views; while a second group, before being asked its views, was informed about the average teacher salary in their state.

As shown in Tables 7-8, respondents who learn about President Obama’s endorsement of merit pay or about research that demonstrates a linkage between merit pay and student learning express higher levels of support. No surprise here. Interestingly, though, the effect associated with an Obama endorsement is roughly twice as large as that associated with academic research. And more surprising still, Democrats and Republicans alike responded favorably to an Obama endorsement. Meanwhile, Obama’s endorsement had the largest effect on the expressed views of teachers, and the weakest on parents.4

Tables 9-10 show that informing people of average teacher salaries in their states depresses support for increasing teacher pay. In this instance, however, additional information had the weakest effect on the expressed views of teachers.5 This stability is not simply a result of teachers being fully informed about actual salaries. An Education Next-PEPG Survey fielded in 2007 asked respondents to name the average salary of teachers in their states. On average, respondents underestimated these salaries by more than $14,000, or nearly one-third of the actual average salaries. Teachers underestimated teacher salaries in their state by almost $9,500 (or 20 percent of actual salaries), making them only modestly more accurate in their assessments than the public as a whole.

**Education Policy More Broadly**

Disagreements between parents and teachers on merit pay are not emblematic of their views across all education policy proposals. Figure 1 shows the difference in support between parents and teachers for twelve policies appearing in the survey. The largest cleavages are observed on merit pay items, though substantial differences also appear on issues involving teacher tenure more generally and renewal of the No Child Left Behind Act. Modest differences appear on public support for charter schools, vouchers, and tax-credits. And for the most part, teachers and parents reveal little disagreement on increased spending or proposals that would raise teacher salaries in exchange for eliminating tenure.

For the most part, the differences between parents and teachers across this larger collection of education issues exceed those observed between Democrats and Republicans. As Figure 2 shows, on most issues Democratic and Republican support differs by less than ten percentage points. The largest differences between these two groups concern per-pupil spending, beliefs about the effectiveness of spending increases on improving educational outcomes, and increasing teacher salaries. Even these differences, though, are smaller in magnitude than those observed for the most contentious issues for parents and teachers. On merit pay, meanwhile, consensus reigns among Democrats and Republicans.

We also investigated how people’s attitudes on merit pay fit into the broader structure of their thinking about education reforms. In Tables 11-13, we display results

---

4 Regression results (not presented) including interactions between the treatment associated with Obama’s endorsement and subgroup indicators, though sometimes large in magnitude, are imprecisely estimated and hence statistically insignificant.

5 This result is confirmed by regression results (not presented) including an interaction between teacher status and treatment.
for exploratory factor analyses of attitudes on these twelve items first for the public as a whole, then for Republicans and Democrats, and finally for parents and teachers. For the public as a whole, two factors are apparent, the first of which captures people’s attitudes on choice and accountability, and the second of which concerns their views on education spending. The results for the various subgroups look remarkably similar. Common items continue to load together; and though the order of factors occasionally differs, the number remains perfectly consistent. These findings suggest that Republicans, Democrats, parents, and teachers link education issues together in similar ways. What differ among them, instead, are the conclusions that they draw.

**Summary and Next Steps**

The principal differences in public opinion on merit pay are defined by key stakeholders (in particular parents and teachers) and generally not by partisans or ideological groups. Parents express high levels of support for various forms of merit pay and tenure, whereas teachers express steadfast opposition. These two groups also differ with regard to their propensity to update their views when exposed to new information. Across both experiments, the differences in treatment effects between parents and teachers were consistently larger than those between Republicans and Democrats. None of these groups, however, reveal markedly different structures of opinion formation on education issues. How teachers, parents, Democrats, and Republicans think about education policies does not distinguish these groups nearly as much as what they think.

Currently, the 2010 *Education Next*-PEPG Survey is in the field. This survey includes all of the same merit pay items examined here. It also includes an oversample of teachers, allowing us to make the same sets of comparisons between subgroups. In addition to replicating all of the analyses presented here, we also plan to investigate the stability of respondents’ opinions over time. Roughly 900 of the respondents in the 2010 survey also participated in the 2009 survey, allowing us to compare the propensity of Democrats, Republicans, parents, and teachers to express different views on merit pay (as well as many other issues) from one year to the next.
Table 1: Do you favor or oppose basing a teacher’s salary, in part, on his or her students’ academic progress on state tests?

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Democrats</th>
<th>Republicans</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Oppose</td>
<td>12.2%</td>
<td>13.1%</td>
<td>11.0%</td>
<td>6.8%</td>
<td>42.5%</td>
</tr>
<tr>
<td>Somewhat Oppose</td>
<td>14.9%</td>
<td>14.3%</td>
<td>18.1%</td>
<td>17.3%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Neither Favor nor Oppose</td>
<td>30.2%</td>
<td>31.9%</td>
<td>22.8%</td>
<td>22.1%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Somewhat Favor</td>
<td>29.8%</td>
<td>29.4%</td>
<td>33.9%</td>
<td>34.9%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Completely Favor</td>
<td>12.9%</td>
<td>11.3%</td>
<td>14.2%</td>
<td>18.9%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Note: Percentages based on control condition respondents only, who were not provided with any endorsements of the proposal. Partisan groups include "leaners".

Table 2: Would you favor or oppose a proposal that would require teachers to demonstrate that their students are making adequate progress on state tests in order to receive tenure?

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Democrats</th>
<th>Republicans</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Oppose</td>
<td>7.7%</td>
<td>7.0%</td>
<td>9.4%</td>
<td>7.3%</td>
<td>35.2%</td>
</tr>
<tr>
<td>Somewhat Oppose</td>
<td>12.0%</td>
<td>12.6%</td>
<td>11.6%</td>
<td>9.9%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Neither Favor nor Oppose</td>
<td>29.1%</td>
<td>28.7%</td>
<td>27.5%</td>
<td>23.8%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Somewhat Favor</td>
<td>38.1%</td>
<td>39.0%</td>
<td>37.5%</td>
<td>47.6%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Completely Favor</td>
<td>13.1%</td>
<td>12.7%</td>
<td>14.0%</td>
<td>11.5%</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

Note: Partisan groups include "leaners".

Table 3: Do you think that teacher salaries in your state should increase, decrease, or stay about the same?

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Democrats</th>
<th>Republicans</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly Decrease</td>
<td>0.5%</td>
<td>0.3%</td>
<td>0.6%</td>
<td>0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Decrease</td>
<td>3.9%</td>
<td>2.2%</td>
<td>6.5%</td>
<td>6.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Stay About Same</td>
<td>40.1%</td>
<td>38.5%</td>
<td>45.0%</td>
<td>32.5%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Increase</td>
<td>44.8%</td>
<td>48.4%</td>
<td>38.2%</td>
<td>45.2%</td>
<td>49.1%</td>
</tr>
<tr>
<td>Greatly Increase</td>
<td>10.6%</td>
<td>10.7%</td>
<td>9.7%</td>
<td>16.0%</td>
<td>30.2%</td>
</tr>
</tbody>
</table>

Note: Percentages based on control condition respondents only, who were not provided with information about average teacher salaries in their states. Partisan groups include "leaners".
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Per-pupil Expenditures</td>
<td>0.010</td>
<td>0.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.006]</td>
<td>[0.006]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Avg Teacher Salary</td>
<td>0.003</td>
<td>0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.003]</td>
<td>[0.003]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (4 point scale)</td>
<td>-0.038</td>
<td>-0.036</td>
<td>-0.038</td>
<td>-0.037</td>
</tr>
<tr>
<td></td>
<td>[0.020]**</td>
<td>[0.020]**</td>
<td>[0.020]**</td>
<td>[0.020]**</td>
</tr>
<tr>
<td>Male</td>
<td>0.032</td>
<td>0.030</td>
<td>0.033</td>
<td>0.031</td>
</tr>
<tr>
<td></td>
<td>[0.038]</td>
<td>[0.038]</td>
<td>[0.038]</td>
<td>[0.038]</td>
</tr>
<tr>
<td>Household Income</td>
<td>-0.008</td>
<td>-0.008</td>
<td>-0.008</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>[0.005]</td>
<td>[0.005]</td>
<td>[0.005]</td>
<td>[0.005]</td>
</tr>
<tr>
<td>Black</td>
<td>0.126</td>
<td>0.134</td>
<td>0.104</td>
<td>0.112</td>
</tr>
<tr>
<td></td>
<td>[0.053]*</td>
<td>[0.053]*</td>
<td>[0.052]*</td>
<td>[0.052]*</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>0.043</td>
<td>0.042</td>
<td>0.038</td>
<td>0.038</td>
</tr>
<tr>
<td></td>
<td>[0.058]</td>
<td>[0.058]</td>
<td>[0.058]</td>
<td>[0.058]</td>
</tr>
<tr>
<td>Age (centered at mean value)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Parent</td>
<td>0.107</td>
<td>0.106</td>
<td>0.113</td>
<td>0.111</td>
</tr>
<tr>
<td></td>
<td>[0.047]*</td>
<td>[0.047]*</td>
<td>[0.047]*</td>
<td>[0.047]*</td>
</tr>
<tr>
<td>Own Home</td>
<td>0.078</td>
<td>0.076</td>
<td>0.085</td>
<td>0.083</td>
</tr>
<tr>
<td></td>
<td>[0.050]</td>
<td>[0.050]</td>
<td>[0.050]</td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>-0.556</td>
<td>-0.556</td>
<td>-0.552</td>
<td>-0.552</td>
</tr>
<tr>
<td></td>
<td>[0.043]**</td>
<td>[0.043]**</td>
<td>[0.044]**</td>
<td>[0.044]**</td>
</tr>
<tr>
<td>Independent (non-leaning)</td>
<td>-0.102</td>
<td>-0.106</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.094]</td>
<td>[0.093]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republican (including leaning)</td>
<td>0.036</td>
<td>0.034</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.040]</td>
<td>[0.039]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>0.007</td>
<td>0.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.046]</td>
<td>[0.046]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>-0.018</td>
<td>-0.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.050]</td>
<td>[0.050]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merit Pay Treatment 1 (Obama Supports)</td>
<td>0.124</td>
<td>0.124</td>
<td>0.121</td>
<td>0.122</td>
</tr>
<tr>
<td></td>
<td>[0.044]**</td>
<td>[0.044]**</td>
<td>[0.045]**</td>
<td>[0.045]**</td>
</tr>
<tr>
<td>Merit Pay Treatment 2 (Research Supports)</td>
<td>0.059</td>
<td>0.060</td>
<td>0.052</td>
<td>0.052</td>
</tr>
<tr>
<td></td>
<td>[0.048]</td>
<td>[0.048]</td>
<td>[0.048]</td>
<td>[0.048]</td>
</tr>
<tr>
<td>Observations</td>
<td>3027</td>
<td>3027</td>
<td>2999</td>
<td>2999</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.07</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Note: Policy attitude scaled from -1 (completely opposed) to 1 (completely favor). Robust standard errors in brackets. + significant at 10%; * significant at 5%; ** significant at 1%.
Table 5: OLS Regressions for Attitudes on Performance Tenure

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District Per-pupil Expenditures</strong> (in $1,000 units, centered at mean value)</td>
<td>0.007</td>
<td>0.007</td>
<td>[0.005]</td>
<td>[0.005]</td>
</tr>
<tr>
<td><strong>State Avg Teacher Salary</strong> (in $1,000 units, centered at mean value)</td>
<td>0.003</td>
<td>0.003</td>
<td>[0.002]</td>
<td>[0.003]</td>
</tr>
<tr>
<td><strong>Education</strong> (4 point scale, centered at median value)</td>
<td>-0.052</td>
<td>-0.050</td>
<td>-0.050</td>
<td>-0.049</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>-0.025</td>
<td>-0.026</td>
<td>-0.023</td>
<td>-0.025</td>
</tr>
<tr>
<td><strong>Household Income</strong> (19 point scale, centered at median value)</td>
<td>[0.018]**</td>
<td>[0.018]**</td>
<td>[0.019]**</td>
<td>[0.019]**</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>0.113</td>
<td>0.119</td>
<td>0.099</td>
<td>0.105</td>
</tr>
<tr>
<td><strong>Hispanic Ethnicity</strong></td>
<td>0.104</td>
<td>0.102</td>
<td>0.097</td>
<td>0.095</td>
</tr>
<tr>
<td><strong>Age</strong> (centered at mean value)</td>
<td>[0.051]**</td>
<td>[0.051]**</td>
<td>[0.051]**</td>
<td>[0.051]**</td>
</tr>
<tr>
<td><strong>Parent</strong></td>
<td>0.082</td>
<td>0.084</td>
<td>0.081</td>
<td>0.083</td>
</tr>
<tr>
<td><strong>Own Home</strong></td>
<td>0.113</td>
<td>0.114</td>
<td>0.107</td>
<td>0.108</td>
</tr>
<tr>
<td><strong>Teacher</strong></td>
<td>-0.479</td>
<td>-0.479</td>
<td>-0.477</td>
<td>-0.478</td>
</tr>
<tr>
<td><strong>Independent</strong> (non-leaning)</td>
<td>[0.040]**</td>
<td>[0.040]**</td>
<td>[0.041]**</td>
<td>[0.040]**</td>
</tr>
<tr>
<td><strong>Republican</strong> (including leaning)</td>
<td>0.021</td>
<td>0.021</td>
<td>0.021</td>
<td>0.021</td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
<td>0.045</td>
<td>0.047</td>
<td>[0.042]</td>
<td>[0.042]</td>
</tr>
<tr>
<td><strong>Conservative</strong></td>
<td>0.010</td>
<td>0.014</td>
<td>[0.045]</td>
<td>[0.045]</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>3027</td>
<td>3027</td>
<td>3001</td>
<td>3001</td>
</tr>
<tr>
<td><strong>R-Squared</strong></td>
<td>0.06</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Note: Policy attitude scaled from -1 (completely opposed) to 1 (completely favor). Robust standard errors in brackets. + significant at 10%; * significant at 5%; ** significant at 1%.
Table 6: OLS Regressions for Attitudes Toward Teacher Salaries

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Per-pupil Expenditures</td>
<td>-0.014</td>
<td>-0.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in $1,000 units, centered at mean value)</td>
<td>[0.004]**</td>
<td>[0.004]**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Avg Teacher Salary</td>
<td>-0.005</td>
<td>-0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in $1,000 units, centered at mean value)</td>
<td>[0.002]**</td>
<td>[0.002]**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.14</td>
<td>0.11</td>
<td>0.10</td>
<td>0.08</td>
</tr>
<tr>
<td>(4 point scale, centered at median value)</td>
<td>[0.012]</td>
<td>[0.012]</td>
<td>[0.012]</td>
<td>[0.012]</td>
</tr>
<tr>
<td>Male</td>
<td>-0.017</td>
<td>-0.015</td>
<td>-0.016</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>[0.023]</td>
<td>[0.023]</td>
<td>[0.023]</td>
<td>[0.023]</td>
</tr>
<tr>
<td>Household Income</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>(19 point scale, centered at median value)</td>
<td>[0.003]</td>
<td>[0.003]</td>
<td>[0.003]</td>
<td>[0.003]</td>
</tr>
<tr>
<td>Black</td>
<td>0.15</td>
<td>0.204</td>
<td>0.211</td>
<td>0.199</td>
</tr>
<tr>
<td></td>
<td>[0.035]**</td>
<td>[0.035]**</td>
<td>[0.034]**</td>
<td>[0.034]**</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>0.113</td>
<td>0.115</td>
<td>0.115</td>
<td>0.118</td>
</tr>
<tr>
<td></td>
<td>[0.038]**</td>
<td>[0.038]**</td>
<td>[0.037]**</td>
<td>[0.037]**</td>
</tr>
<tr>
<td>Age</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td>(centered at mean value)</td>
<td>[0.001]**</td>
<td>[0.001]**</td>
<td>[0.001]**</td>
<td>[0.001]**</td>
</tr>
<tr>
<td>Parent</td>
<td>0.031</td>
<td>0.032</td>
<td>0.038</td>
<td>0.038</td>
</tr>
<tr>
<td></td>
<td>[0.030]</td>
<td>[0.029]</td>
<td>[0.029]</td>
<td>[0.029]</td>
</tr>
<tr>
<td>Own Home</td>
<td>-0.030</td>
<td>-0.029</td>
<td>-0.027</td>
<td>-0.026</td>
</tr>
<tr>
<td></td>
<td>[0.029]</td>
<td>[0.029]</td>
<td>[0.029]</td>
<td>[0.029]</td>
</tr>
<tr>
<td>Teacher</td>
<td>0.248</td>
<td>0.248</td>
<td>0.250</td>
<td>0.250</td>
</tr>
<tr>
<td></td>
<td>[0.026]**</td>
<td>[0.026]**</td>
<td>[0.026]**</td>
<td>[0.026]**</td>
</tr>
<tr>
<td>Independent</td>
<td>-0.020</td>
<td>-0.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(non-leaning)</td>
<td>[0.065]</td>
<td>[0.067]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republican</td>
<td>-0.049</td>
<td>-0.047</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(including leaning)</td>
<td>[0.025]**</td>
<td>[0.025]**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>-0.048</td>
<td>-0.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>-0.088</td>
<td>-0.092</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Pay Treatment 1</td>
<td>-0.105</td>
<td>-0.101</td>
<td>-0.106</td>
<td>-0.103</td>
</tr>
<tr>
<td>(Avg Salary Provided)</td>
<td>[0.022]**</td>
<td>[0.022]**</td>
<td>[0.022]**</td>
<td>[0.022]**</td>
</tr>
<tr>
<td>Observations</td>
<td>3028</td>
<td>3028</td>
<td>3000</td>
<td>3000</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Note: Policy attitude scaled from -1 (greatly decrease) to 1 (greatly increase). Robust standard errors in brackets. + significant at 10%; * significant at 5%; ** significant at 1%.
Table 7: Do you favor or oppose basing a teacher’s salary, in part, on his or her students’ academic progress on state tests?

<table>
<thead>
<tr>
<th></th>
<th>No Endorsement</th>
<th>Obama Endorsement</th>
<th>Research Endorsement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Oppose</td>
<td>12.2%</td>
<td>7.9%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Somewhat Oppose</td>
<td>14.9%</td>
<td>13.3%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Neither Favor nor</td>
<td>30.2%</td>
<td>22.0%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Oppose</td>
<td>29.8%</td>
<td>40.5%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Completely Favor</td>
<td>12.9%</td>
<td>16.3%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

Note: Conditions were randomly assigned. One group was provided with any additional information while two other groups were told that President Obama and research evidence support the proposal respectively.

Table 8: Effect on Percent Supporting Proposal

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Democrats</th>
<th>Republicans</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama Endorsement</td>
<td>+14.1%</td>
<td>+16.5%</td>
<td>+11.2%</td>
<td>+10.8%</td>
<td>+20.3%</td>
</tr>
<tr>
<td>Research Endorsement</td>
<td>+7.0%</td>
<td>+10.0%</td>
<td>+4.5%</td>
<td>+2.9%</td>
<td>+7.2%</td>
</tr>
</tbody>
</table>

Cells display the differences between treatment condition and control condition in percent supporting merit pay. Control condition received no endorsement of the policy. Partisan groups include “leaners”.
Table 9: Do you think that teacher salaries in your state should increase, decrease, or stay about the same?

<table>
<thead>
<tr>
<th></th>
<th>No information</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly Decrease</td>
<td>0.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Decrease</td>
<td>3.9%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Stay About Same</td>
<td>40.1%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Increase</td>
<td>44.8%</td>
<td>32.3%</td>
</tr>
<tr>
<td>Greatly Increase</td>
<td>10.6%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

Note: Conditions were randomly assigned. Control condition respondents received no information about average salaries in their states. Treatment condition respondents were told the average teacher salary in their states prior to answering the question.

Table 10: Effect on Percent Supporting Salary Increase

<table>
<thead>
<tr>
<th>Information on Average Salary</th>
<th>All</th>
<th>Democrats</th>
<th>Republicans</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-14.9%</td>
<td>-17.7%</td>
<td>-10.6%</td>
<td>-15.1%</td>
<td>-5.3%</td>
</tr>
</tbody>
</table>

Cells display the differences between treatment condition and control condition in percent favoring increasing teacher salaries. Control condition received no additional information about average teacher salaries in their states. Partisan groups include "leaners".
Table 11: Factor Analysis for All Respondents

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Spending</td>
<td>-0.02</td>
<td>0.71</td>
</tr>
<tr>
<td>Effectiveness of Spending</td>
<td>0.03</td>
<td>0.71</td>
</tr>
<tr>
<td>Charter Schools</td>
<td>0.46</td>
<td>-0.05</td>
</tr>
<tr>
<td>Vouchers</td>
<td>0.57</td>
<td>0.09</td>
</tr>
<tr>
<td>Tax Credits</td>
<td>0.51</td>
<td>0.16</td>
</tr>
<tr>
<td>NCLB Renewal</td>
<td>0.34</td>
<td>-0.08</td>
</tr>
<tr>
<td>National Standards</td>
<td>0.24</td>
<td>-0.08</td>
</tr>
<tr>
<td>Teacher Pay</td>
<td>-0.02</td>
<td>0.61</td>
</tr>
<tr>
<td>Merit Pay</td>
<td>0.60</td>
<td>-0.14</td>
</tr>
<tr>
<td>Teacher Tenure</td>
<td>-0.16</td>
<td>0.42</td>
</tr>
<tr>
<td>Tenure-Pay Tradeoff</td>
<td>0.36</td>
<td>0.15</td>
</tr>
<tr>
<td>Merit Tenure</td>
<td>0.58</td>
<td>-0.08</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>1.88</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Note: Factors with eigenvalues greater than one retained. Varimax rotation used for loadings.

Table 12: Factor Analysis by Party Identification

<table>
<thead>
<tr>
<th></th>
<th>Republicans</th>
<th></th>
<th>Democrats</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
<td>Factor 2</td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
<td>District Spending</td>
<td>0.72</td>
<td>-0.03</td>
<td>-0.01</td>
<td>0.67</td>
</tr>
<tr>
<td>Effectiveness of Spending</td>
<td>0.72</td>
<td>-0.01</td>
<td>0.05</td>
<td>0.67</td>
</tr>
<tr>
<td>Charter Schools</td>
<td>-0.13</td>
<td>0.43</td>
<td>0.49</td>
<td>0.04</td>
</tr>
<tr>
<td>Vouchers</td>
<td>0.00</td>
<td>0.54</td>
<td>0.60</td>
<td>0.13</td>
</tr>
<tr>
<td>Tax Credits</td>
<td>0.10</td>
<td>0.48</td>
<td>0.51</td>
<td>0.17</td>
</tr>
<tr>
<td>NCLB Renewal</td>
<td>-0.05</td>
<td>0.35</td>
<td>0.36</td>
<td>-0.06</td>
</tr>
<tr>
<td>National Standards</td>
<td>-0.05</td>
<td>0.27</td>
<td>0.21</td>
<td>-0.09</td>
</tr>
<tr>
<td>Teacher Pay</td>
<td>0.67</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.57</td>
</tr>
<tr>
<td>Merit Pay</td>
<td>-0.21</td>
<td>0.57</td>
<td>0.63</td>
<td>-0.10</td>
</tr>
<tr>
<td>Teacher Tenure</td>
<td>0.48</td>
<td>-0.18</td>
<td>-0.19</td>
<td>0.34</td>
</tr>
<tr>
<td>Tenure-Pay Tradeoff</td>
<td>0.16</td>
<td>0.42</td>
<td>0.35</td>
<td>0.11</td>
</tr>
<tr>
<td>Merit Tenure</td>
<td>-0.07</td>
<td>0.55</td>
<td>0.64</td>
<td>-0.11</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>2.04</td>
<td>1.53</td>
<td>1.98</td>
<td>1.43</td>
</tr>
</tbody>
</table>

Note: Factors with eigenvalues greater than one retained. Varimax rotation used for loadings. Partisan groups include "leaners".
## Table 13: Factor Analysis by Subgroup

<table>
<thead>
<tr>
<th></th>
<th>Parents Factor 1</th>
<th>Parents Factor 2</th>
<th>Teachers Factor 1</th>
<th>Teachers Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Spending</td>
<td>-0.04</td>
<td>0.68</td>
<td>-0.08</td>
<td>0.77</td>
</tr>
<tr>
<td>Effectiveness of Spending</td>
<td>0.04</td>
<td>0.69</td>
<td>-0.06</td>
<td>0.74</td>
</tr>
<tr>
<td>Charter Schools</td>
<td>0.38</td>
<td>-0.13</td>
<td>0.43</td>
<td>-0.31</td>
</tr>
<tr>
<td>Vouchers</td>
<td>0.60</td>
<td>0.06</td>
<td>0.51</td>
<td>-0.27</td>
</tr>
<tr>
<td>Tax Credits</td>
<td>0.55</td>
<td>0.07</td>
<td>0.44</td>
<td>-0.17</td>
</tr>
<tr>
<td>NCLB Renewal</td>
<td>0.36</td>
<td>-0.13</td>
<td>0.30</td>
<td>-0.05</td>
</tr>
<tr>
<td>National Standards</td>
<td>0.19</td>
<td>-0.06</td>
<td>0.22</td>
<td>-0.01</td>
</tr>
<tr>
<td>Teacher Pay</td>
<td>-0.03</td>
<td>0.61</td>
<td>-0.11</td>
<td>0.56</td>
</tr>
<tr>
<td>Merit Pay</td>
<td>0.57</td>
<td>-0.08</td>
<td>0.59</td>
<td>-0.05</td>
</tr>
<tr>
<td>Teacher Tenure</td>
<td>-0.17</td>
<td>0.34</td>
<td>-0.36</td>
<td>0.31</td>
</tr>
<tr>
<td>Tenure-Pay Tradeoff</td>
<td>0.25</td>
<td>0.19</td>
<td>0.39</td>
<td>0.01</td>
</tr>
<tr>
<td>Merit Tenure</td>
<td>0.56</td>
<td>-0.08</td>
<td>0.62</td>
<td>-0.07</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>1.80</td>
<td>1.42</td>
<td>2.49</td>
<td>1.08</td>
</tr>
</tbody>
</table>

Note: Factors with eigenvalues greater than one retained. Varimax rotation used for loadings.
Figure 1: Differences between Parent and Teacher Support for Various Education Policies

Positive values indicate higher support among parents. Negative values indicate higher support among teachers. The dashed red vertical line identifies the point of no difference between the two groups.
Figure 2: Differences between Republican and Democratic Support for Various Education Policies

Positive values indicate higher support among Republicans. Negative values indicate higher support among Democrats. The dashed red vertical line identifies the point of no difference between the two groups.