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Author(s): Rebecca Jacobsen, Jeffrey W. Snyder, and Andrew Saultz


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Informing or Shaping Public Opinion? The Influence of School Accountability Data Format on Public Perceptions of School Quality

REBECCA JACOBSEN
Michigan State University

JEFFREY W. SNYDER
Michigan State University

ANDREW SAULTZ
Miami University

The 2001 No Child Left Behind Act requires local education agencies to publicly disseminate school performance data. In response, districts and state departments of education have created “school report cards” that vary widely. While data dissemination policies can improve institutional legitimation and ensure ongoing support, we suggest that the potential to diminish or undermine legitimation also exists. Using data from a population-based survey experiment, we demonstrate that people assign significantly different meanings to some formats. We find that format influences not only the average rating individuals assign to schools with the same performance levels but also difference perceived among schools of varying performance.

Introduction

The expansion of accountability policies in education has led to a dramatic proliferation of publicly available school performance data. The 2001 No Child Left Behind (NCLB) Act requires states and local education agencies to publicly disseminate accountability data, making school report cards ubiquitous. However, NCLB does not specify the format of these data, instead allowing each state to develop its own unique version of how the data should...
be presented. The result is widely varying report card formats across the states. For example, states like Florida provide an overall grade—A through F—for each school, while others, such as Georgia, report a numerical performance index score. While both systems ostensibly report similar information—the relative achievement of students within the school—it is not clear whether these formatting policy choices differentially influence public perceptions of school quality. Do people assign different meanings to these alternative formats, thereby constructing different implications for action? At a time when many educational policy makers are stressing the need to make more data available for the public (e.g., Duncan 2010) and simultaneously turning to the public for increased support to implement new reforms, understanding how public accountability data influence perceptions of school quality potentially informs the likelihood of public support for new policies. To examine this possibility, we test how the format of performance accountability data influences public satisfaction with school performance. Using data from a population-based survey experiment, we demonstrate that people interpret performance differently across schools, with some formats leading to significantly more positive views of school performance.

Background

Theory of Action for Data Dissemination: Maintaining Legitimacy

Policy makers have placed great faith in the power of performance management in education, as well as other fields (Moynihan 2008; Spillane 2012). One key component of performance management is the collection and dissemination of performance data. Performance data hold many promises, including enabling citizens to more accurately judge their public institutions (Moynihan 2008). Today’s accountability policies in education incorporate this aspect of performance management and expect that engaged and interested citizens will be better able to judge the performance of their schools and school leaders and, thus, hold them more accountable.

Rewards for maintaining legitimacy.—All organizations must maintain institutional legitimacy in order to preserve their status and ensure the continued provision of resources (DiMaggio and Powell 1983). For institutions such as schools, with multiple and ambiguous goals, maintaining institutional legiti-
macy is particularly challenging. This is because it can be difficult to demonstrate effective decision making and sound use of public funds when expectations are multiple and diffuse. Creating and disseminating performance report cards is one way to demonstrate success and maintain legitimacy. In fact, dissemination of data alone can improve legitimacy because it provides a “defense against the perception of irrationality” and makes the institution appear open and transparent (Meyer and Rowan 1977). When institutions are perceived to be legitimate, external actors continue to provide needed financial and political support to the institution (Meyer and Rowan 1977). Public programs that communicate effectively with the people are also rewarded for their perceived legitimacy with strengthened community ties (Gormley and Weimer 1999; Mintrom 2001).

However, when institutions are no longer perceived to be legitimate, external actors can begin to withdraw support. In the private sector, this may mean no longer purchasing from a particular business. However, in the case of public institutions like schools, removal of financial and political support comes in the form of voting down tax levy increases or construction bond initiatives on the ballot. Previous research has demonstrated that citizens do indeed take such actions (Donahue and Miller 2006; Glaser and Hildreth 1999; Simonsen and Robbins 2003). In one study of taxpayers in Connecticut, negative evaluations of police service quality and negative evaluations of the trustworthiness of the police significantly decreased the willingness of citizens to pay additional taxes for local police services (Donahue and Miller 2006). Simply put, the people do not want to continue to waste money on institutions they perceive as ineffective. Thus, performance data dissemination can inform how citizens view the legitimacy of public institutions and determine which are seen as deserving ongoing support.

Efforts to reduce the asymmetry of information.—While information is key to this process, the public often lacks the necessary information. Gathering this information independently is costly. Thus, the public is notoriously unaware of many policy issues (Delli Carpini and Keeter 1989), and this lack of knowledge in the education arena may be especially acute, as many citizens have no direct interaction with schools. Even parents of school-aged children may have little more than informal interactions with a small handful of teachers on which to judge the quality of the school or the whole school system. This principal-agent problem is well known to economists. If stakeholders (parents, community members, or policy makers) have “difficulty monitoring the activities of schools, then educators might behave in a manner contrary to the interests of these stakeholders” (Figlio and Loeb 2011, 386). This asymmetry of information hinders the ability of the people to judge the legitimacy of the institution.

Believing that dissemination of data can reduce the asymmetry of infor-
Public Perceptions of School Quality

formation by decreasing the costs associated with gathering information on school performance, policy makers have expanded the availability of education data (Feuer 2008; McDonnell 2008). A popular method for providing the public with data is through performance report cards (Gormley and Weimer 1999). While NCLB has significantly expanded the availability of performance data by mandating dissemination, performance reporting in education is not a new concept. In fact, early efforts began in the 1960s with the development of the National Assessment of Educational Progress (NAEP). Commonly referred to as “the Nation’s Report Card,” NAEP has publicly reported what students know and are able to do across a variety of subjects since 1969 (Jones and Olkin 2004).

While early NAEP publicly reported only national trends, the U.S. Department of Education’s “wall chart,” which began in 1984, provided data on state trends, enabling comparisons between states (Ginsberg et al. 1988; Mehta 2013). The simple and clear state rankings in the wall chart made public consumption of the data straightforward and easy but also sparked widespread complaints from some educators and state policy makers (Ginsberg et al. 1988). Some states responded to the Department of Education wall chart by developing their own internal report cards, some of which improved significantly on the measures used in the wall chart. Thus, by 2001, when NCLB required all states to make performance data “widely available through public means, such as posting on the Internet, distribution to the media, and distribution through public agencies” (NCLB 2002), 45 states were already publishing their own school report cards (Education Week 2001). While NCLB did not initiate the publication of school performance data, it has significantly expanded the amount, reach, and sophistication level of these data (Haertel and Herman 2005). Important to all of these efforts to disseminate school performance data is the expectation that the public will use the data to inform its judgment of the public schools.

Policy Feedback: Legitimacy and the Future Politics of Education Policy

Understanding the way data dissemination policies shape the perceived legitimacy of the public education system is important because there is the potential that these efforts will have long-term effects that reshape the political will of the electorate toward public education. Drawing on policy feedback theory, which posits “that policies enacted and implemented at one point in time shape subsequent political dynamics” (McDonnell 2009, 417), we suggest that education research must also consider the ways accountability performance data policies are fundamentally reshaping how the citizenry views its public schools and its willingness to support new and ongoing reform efforts.
Traditionally, policy has been seen as the outcome of politics. Popularized in many textbooks, the stages heuristic for policy making—agenda setting, formulation, implementation, and evaluation (Dye 1998)—leads scholars to view politics only as the input (or independent variable) and policies as the output (or dependent variable). However, scholars in political science are increasingly seeking to understand the ways that policies, once enacted, shape future politics, essentially reversing the causal arrow on this traditional model (Mettler 2002; Soss and Schram 2007). Policy feedback theory holds that first, “the design of public policies influences the attitudes and political behaviors of both target populations and other members of the public,” and second, “these policy-generated attitudes and behaviors can feed back into the political system, shaping the political environment and the possibilities for future policy making” (Campbell 2011, 962).

While not a new idea—Schattschneider (1975, 288) observed, “new policies creates new politics”—only recently have scholars begun to empirically examine the multiple ways that policies shape future politics. We now know, for example, that policies create or define political communities, send messages about the characteristics of the members of particular communities, and impact citizens’ capacities for civic and political engagement by distributing resources or by developing incentives (or disincentives) for political mobilization (Mettler and Soss 2004). Additionally, and of most relevance for this article, policies can shape public perceptions of social problems and government actions (Mettler and Soss 2004). For example, rather than creating universal preschool programs, policy makers opted for child care tax credits. Such policy choices influence perceptions because those taking advantage of tax credits often do not view themselves as direct beneficiaries of government support and programs (Campbell 2011; Koch and Mettler 2012; Mettler 2007, 2011). Correspondingly, these citizens often express less support for more visible programs (e.g., universal preschool) and means-tested spending programs (e.g., food stamps). The policy design of tax credits leads citizens benefiting from these programs to not perceive themselves as receiving the same type of government support these other programs provide, thus fostering less favorable opinions for these policies. As this example demonstrates, by shaping perceptions, policies can thus foster, or diminish, public confidence and trust in government action (Wichowsky and Moynihan 2008) and impact whether the public views government programs and institutions as legitimate and deserving of support. We suggest that different educational data formats have the potential to reshape how the public views their schools. If the formats we examine have uniform effects, some may argue that the system is working as intended. However, if we find effects that are not uniform and some formats induce more negative views, especially more negative than intended, these
policies may hinder the ability of policy makers to generate support for ongoing reform and improvement efforts.

**Data Use Studies in Education**

While education has many constituent groups (e.g., parents, business leaders, teachers, home buyers), education research has focused primarily on data use in schools. More than a decade of research focuses on how districts, schools, and their faculty use data to shape their instructional actions. For example, Booher-Jennings (2005) found evidence that schools directed instructional resources at “bubble” students—those students who fell either just above or just below cut points on standardized tests. Diamond and Cooper (2007) found similar results but also that teachers in well-performing schools used achievement data to broadly improve instructional practices. However, teachers in low-performing schools were likely to change in ways less conducive to improving general instructional practices and more focused on improving data (i.e., focusing on testing skills rather than attempting to improve learning). Administratively, schools also modified behavior based on accountability data. Research suggests that schools disproportionately excluded low-performing students from taking state tests in efforts to fare better on accountability metrics (Vasquez Heilig and Darling-Hammond 2008). Another study finds that schools facing the threat of sanction invested more resources in teacher training, instructional technology, and curricular development (Chiang 2009). Finally, accountability data also influenced teacher labor market preferences. Studies find teacher turnover increased in schools performing poorly on accountability metrics (Clotfelter et al. 2004; Feng et al. 2010). While not an exhaustive list of research by any means, these studies show the breadth of research on data use within schools.

Beyond school personnel responses, studies also demonstrate that parents respond to school accountability data. While factors such as school safety, high academic standards, and shared cultural and geographical factors are important to parents (Armor and Peiser 1997; Bell 2009; Godwin et al. 1998; Schneider et al. 2000), several studies identified direct parental reactions to school accountability data. Hastings and Weinstein (2008), for example, investigated whether parental school choices changed when provided data on testing results. Their findings, that a higher proportion of parents receiving such information chose high-performing schools than those not receiving information on test performance, indicate that parents do respond to performance data. More generally, research also demonstrates that parental satisfaction positively correlates with a school’s grade on its accountability report card (Charbonneau and Van Ryzin 2012). Other research finds that changes
in letter grades correlated with changing parental satisfaction with school quality (Jacobsen and Saultz 2013; Jacobsen et al. 2013; Rockoff and Turner 2008). These results, taken together, provide a pattern of evidence suggesting parental attention and response to school accountability data.

Other stakeholders, even those without direct involvement in schools, also utilize data to push for changes in education. However, research focusing on school performance data use beyond school actors is less extensive. The business community is an important provider of support for education in many major cities. Thus, business perceptions of school quality often shape whether and how they support the system. In Houston, for example, dissatisfaction with lagging school progress toward higher academic outcomes led business leaders to advocate for a change in school leadership (Longoria 1998). Dissatisfaction in Chicago proved even more dramatic as business leaders who were frustrated with academic progress in Chicago Public Schools led the push to overhaul governance structures and strengthen mayoral control of city schools (Shipps 1998). These governance changes highlight ways in which academic performance data can influence other public actors and contribute to their interjection in education policy.

Finally, how school performance data shape the broader public is a small but growing area of research. One area where a significant body of research exists is on the housing market’s response to school quality. Researchers investigated whether individuals are willing to pay a premium for higher-quality schools in the neighborhood of the new home. For example, using data from Florida on housing sales before and after the introduction of the Florida school report cards, Figlio and Lucas (2004) find an independent effect of school grades on housing prices, though these impacts appear to be short lived. The major impact appeared immediately after school grades were introduced and faded over time. In part, this could be due to school grade volatility as homes in neighborhoods where schools consistently received grades of “A” maintained the housing price increase. In an earlier study, Black (1999) investigated homes that were close to district attendance boundaries. Holding other variables constant, she found that an increase of 5% in test scores increased the value of a home by about 2.5%. While not all studies found the same strong, positive effect, the preponderance of evidence suggests that “school accountability information [was] itself quite consequential, not only for parents of students but also for members of the general public in terms of their asset values” (Figlio and Loeb 2011, 388; see also Black and Machin 2011).

In this work, we focus on the broader public because all citizens make important decisions about whether, and to what degree, to support the public education system. Thus, schools are accountable to the people (McDonnell 2005, 2008). Therefore, polling the larger public, rather than only parents, school staff, businesses, or any other individual stakeholder group, is critical.
to understanding how opinions develop to shape future education politics. While different groups within the public (i.e., teachers, parents, business leaders, etc.) may hold unique views, we only consider broader trends in this particular work.

We examine how policy choices regarding the exact format of data may have differential effects on public opinion. In other domains, cognitive psychologists and economists have demonstrated that data presentation can impact people’s ability to use information. As Fung et al. (2007) note in their comprehensive study of transparency policies, “research suggests that how information is presented can have as much influence on people’s behavior as the factual content of the data” (44). Given this, we suggest that policy choices regarding the format of school performance report cards differentially structure public perceptions of school system legitimacy, thereby promoting (or hindering) continued support from the public. Next, we provide an explanation of how we tested this assertion.

Data

Sample

The data used in this study are from an experimental population-based survey (Mutz 2011) fielded by Knowledge Networks, whose probability-based KnowledgePanel is the only nationally representative online panel recruited via both random-digit-dialing and address-based sampling. Population-based survey experiments enable researchers to test theories “on samples that are representative of the populations to which they are said to apply,” thereby providing stronger external validity (Mutz 2011, 3).

Panelists were randomly drawn from the KnowledgePanel, and, of the 1,833 invited, 1,111 panelists responded to the invitation. This represents a final-stage response rate of 60.6%. The study sample is representative of the larger U.S. population, and table 1 provides demographic information for the sample as a whole relative to the U.S. Current Population Survey (CPS) from December 2011.

Survey Instrument Conditions

A review of 59 school report cards—each state, Washington, DC, and the eight largest cities—yielded four common data formats: (1) performance index ratings, (2) letter grades, (3) performance rankings, and (4) percent of students meeting a goal. All four are intended to convey the same information—the
TABLE 1

Demographics and Current Population Survey Estimates Percentages

<table>
<thead>
<tr>
<th>Demographic Category</th>
<th>Adult U.S. Population(^a)</th>
<th>Total Sample</th>
<th>PI</th>
<th>LG</th>
<th>PM</th>
<th>AL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.81</td>
<td>49.95</td>
<td>49.65</td>
<td>50.19</td>
<td>51.04</td>
<td>48.89</td>
</tr>
<tr>
<td>Female</td>
<td>52.19</td>
<td>50.05</td>
<td>50.35</td>
<td>49.81</td>
<td>48.96</td>
<td>51.11</td>
</tr>
<tr>
<td><strong>Age:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–24</td>
<td>11.36</td>
<td>10.71</td>
<td>13.38</td>
<td>8.18</td>
<td>11.46</td>
<td>9.63</td>
</tr>
<tr>
<td>25–34</td>
<td>16.84</td>
<td>14.31</td>
<td>14.08</td>
<td>17.10</td>
<td>13.89</td>
<td>12.22</td>
</tr>
<tr>
<td>35–44</td>
<td>16.78</td>
<td>16.20</td>
<td>17.25</td>
<td>13.01</td>
<td>15.63</td>
<td>18.89</td>
</tr>
<tr>
<td>45–54</td>
<td>18.95</td>
<td>19.62</td>
<td>17.25</td>
<td>22.30</td>
<td>19.44</td>
<td>19.63</td>
</tr>
<tr>
<td>55–64</td>
<td>17.25</td>
<td>20.43</td>
<td>17.96</td>
<td>18.96</td>
<td>22.57</td>
<td>22.22</td>
</tr>
<tr>
<td>65 or over</td>
<td>18.83</td>
<td>18.73</td>
<td>20.07</td>
<td>20.44</td>
<td>13.57</td>
<td>17.41</td>
</tr>
<tr>
<td><strong>Race:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>82.40</td>
<td>71.38</td>
<td>72.54</td>
<td>71.75</td>
<td>70.49</td>
<td>70.74</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11.29</td>
<td>12.33</td>
<td>10.21</td>
<td>13.75</td>
<td>14.24</td>
<td>11.11</td>
</tr>
<tr>
<td>Other, non-Hispanic</td>
<td>6.20</td>
<td>3.51</td>
<td>3.87</td>
<td>13.75</td>
<td>2.78</td>
<td>4.44</td>
</tr>
<tr>
<td>2+ races, non-Hispanic</td>
<td>1.46</td>
<td>3.15</td>
<td>3.17</td>
<td>2.97</td>
<td>2.43</td>
<td>4.07</td>
</tr>
<tr>
<td><strong>Educational attainment:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>30.64</td>
<td>32.04</td>
<td>30.28</td>
<td>37.17</td>
<td>30.21</td>
<td>30.74</td>
</tr>
<tr>
<td>Some college</td>
<td>28.69</td>
<td>28.08</td>
<td>28.17</td>
<td>23.79</td>
<td>30.56</td>
<td>29.63</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>28.75</td>
<td>29.25</td>
<td>28.52</td>
<td>28.25</td>
<td>17.83</td>
<td>30.37</td>
</tr>
<tr>
<td><strong>Household income:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $10,000</td>
<td>6.49</td>
<td>5.58</td>
<td>3.87</td>
<td>4.09</td>
<td>6.25</td>
<td>8.15</td>
</tr>
<tr>
<td>$10,000–$24,999</td>
<td>16.36</td>
<td>12.15</td>
<td>14.44</td>
<td>11.15</td>
<td>11.11</td>
<td>11.85</td>
</tr>
<tr>
<td>$25,000–$49,999</td>
<td>26.07</td>
<td>23.13</td>
<td>25.35</td>
<td>27.51</td>
<td>22.57</td>
<td>17.04</td>
</tr>
<tr>
<td>$50,000–$74,999</td>
<td>19.79</td>
<td>18.99</td>
<td>20.07</td>
<td>17.47</td>
<td>18.40</td>
<td>20.00</td>
</tr>
<tr>
<td>$75,000 or more</td>
<td>31.29</td>
<td>40.14</td>
<td>36.27</td>
<td>39.78</td>
<td>41.67</td>
<td>42.96</td>
</tr>
<tr>
<td><strong>Children under 18:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>72.53</td>
<td>65.44</td>
<td>66.20</td>
<td>65.43</td>
<td>63.19</td>
<td>67.04</td>
</tr>
<tr>
<td>Yes</td>
<td>27.47</td>
<td>34.56</td>
<td>33.80</td>
<td>34.57</td>
<td>36.80</td>
<td>32.96</td>
</tr>
<tr>
<td><strong>MSA status:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro</td>
<td>78.73</td>
<td>83.08</td>
<td>82.39</td>
<td>84.01</td>
<td>83.68</td>
<td>82.22</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>21.27</td>
<td>16.92</td>
<td>17.61</td>
<td>15.99</td>
<td>16.32</td>
<td>17.78</td>
</tr>
</tbody>
</table>

**Note.**—PI = performance index; LG = letter grade; PM = percent meeting goal; AL = achievement level.

relative performance of the school’s students. We included city report cards because some urban centers are leaders in the development and distribution of school accountability data. For example, the New York City accountability system is considered an international leader; former New York City School Chancellor Joel Klein has been invited to speak about the system around the world (Medina and Gebeloff 2008). Thus, including these large cities was important to capture the full range of report card formats currently used in the United States.

*Condition 1: performance index rating.*—Some states provide the public with a numerical performance index rating for each school. Two notable examples are California and Ohio. These scores are often decontextualized and can take on a variety of ranges (e.g., California issues an Academic Performance Index [API] score somewhere between 200 and 1,000, whereas Ohio’s falls between 0 and 120). We presented respondents in this condition group with a performance index score between 0 and 200.

*Condition 2: letter grade.*—Many states provide the public with school letter grades. Similar to how students are graded, schools receive “A” through “F” letter grades for their performance. Florida and Michigan are two states where the public receives information in this format.

*Condition 3: percent meeting goal.*—By far the most common data format is reporting the percent of students meeting a specified goal. States may display the goal differently—North Carolina uses percent at or above grade level, while Wisconsin uses the percent scoring at each level of its state test. For our study, respondents in this condition were shown a percent of students between 0 and 100 who met a goal.

*Condition 4: achievement level.*—Several states assign schools achievement levels to signal their performance. For example, Ohio labels each school with one of six designations ranging from “Academic Emergency” to “Excellent with Distinction.” We utilize the achievement levels adopted by the NAEP, which include four designations: below basic, basic, proficient, and advanced, and we added a fifth category—failing—because of the increased use of this label for schools.

**Equate across the Conditions**

To equate the formats across conditions, existing state report cards were used as models. Several states combine two or more of the above formats, making it possible to construct relationships while ensuring ecological validity. We have constructed an equating method based on what best represents existing report card data (see table 2).

*Letter grades to achievement levels.*—The relationship between letter grades and
Table 2

Data Format Equating

<table>
<thead>
<tr>
<th>Achievement Levels</th>
<th>Typical Range</th>
<th>Midpoint</th>
<th>Performance Index out of 200&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>90 and above</td>
<td>95</td>
<td>190</td>
</tr>
<tr>
<td>Proficient</td>
<td>75–89</td>
<td>82</td>
<td>164</td>
</tr>
<tr>
<td>Basic</td>
<td>50–74</td>
<td>62</td>
<td>124</td>
</tr>
<tr>
<td>Below basic</td>
<td>25–49</td>
<td>37</td>
<td>74</td>
</tr>
<tr>
<td>Failing</td>
<td>Below 25</td>
<td>12</td>
<td>24</td>
</tr>
</tbody>
</table>

<sup>a</sup> Double the percent meeting standard.

Achievement levels is straightforward. The five traditionally used letter grades—A, B, C, D, and F—map neatly onto five achievement level ratings (see cols. 1 and 2 in table 2).

**Letter grades/achievement level to percent meeting goal.**—The way that states equate either of the above formats to a percent of students meeting a given goal varies widely. We relied on our assessment of what was most common across the states to equate these formats. We recognize that the ranges listed in table 2 are not uniform, but this reflects what is commonly used across the states to ensure greater ecological validity in our study. Typically, the highest level of achievement (often called “advanced”) is given to a smaller segment of schools. Finally, the midpoint of the range was selected to represent the exact data point displayed in the survey (see cols. 3 and 4 of table 2).

**Percent meeting goal to performance index ratings.**—The final column, the performance index, is the format of data that varies most widely from state to state (see col. 4 of table 2). Because no two states are alike, selecting what is typical is impossible. Therefore, we chose to construct an artificial scale of 200, based on the hypothesis that the public may convert these numbers into a more familiar scale—like a percent out of 100—to interpret these data. To examine this possibility, we doubled the value assigned in the third condition. While, in reality, this would be an incorrect interpretation of these numbers, this design choice enabled us to examine one possibility for the way the public interprets these data.

**Distribution of School Scores**

Performance data were provided for three areas in which schools are commonly expected to develop students’ knowledge, skills, and behaviors: aca-
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TABLE 3

Distribution of School Scores

<table>
<thead>
<tr>
<th>Condition 1: Letter Grades</th>
<th>Condition 2: Performance Index Ratings</th>
<th>Condition 3: Percent Proficient</th>
<th>Condition 4: Achievement Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Acad Arts Citiz Acad Arts Citiz Acad Arts Citiz Acad Arts Citiz</td>
<td>1. Strong B A A 164 190 190 82 95 95 Prof Adv Adv</td>
<td>2. Average C B B 124 164 164 62 82 82 Basic Prof Prof</td>
<td>3. Weak D C C 74 124 124 37 62 62 BB Basic Basic</td>
</tr>
</tbody>
</table>

Note.—Acad = academics; Citiz = citizenship and community responsibility; Prof = proficient; Adv = advanced; BB = below basic.

demics, the arts, and citizenship (Rothstein and Jacobsen 2006). Respondents were randomly assigned to a condition and then viewed performance data for three schools. The data assigned to each school are distributed symmetrically, with C being the average score for academics. School 1—“strong performance” school—was assigned an academic score one unit above the average, and school 3—“weak performance” school—was assigned an academic score one unit below the average (see table 3).

Assessing Satisfaction with School Performance: Dependent Variable

After viewing a school’s data, respondents were asked to evaluate its performance using a seven-point rating scale. Utilizing a modified version of the American Customer Satisfaction Index (ACSI), which is widely cited in the business and media literature (Fornell et al. 1996), respondents express their satisfaction with (1) the overall performance, (2) whether the school meets their expectations, and (3) how close the school is to their ideal school. (See the appendix for a sample of the survey instrument, including the exact question wording for this section.) This trio of questions has been found to have strong internal and retest reliability and the strongest construct validity when compared to five other single- and multi-item satisfaction measures (Van Ryzin 2004b). ACSI measures have long been used in studying consumer satisfaction and behavior. More recently, public administration scholars have used these questions to assess citizen satisfaction with public services (Van Ryzin 2004a, 2004b; Van Ryzin et al. 2004). For each school in each condition, internal consistency (as measured by Cronbach’s alpha) for the set of three satisfaction items was 0.9 or higher. This high level of internal consistency allowed us to average the three questions into a single outcome.
TABLE 4

Average Satisfaction Ratings by Condition

<table>
<thead>
<tr>
<th></th>
<th>Letter Grades</th>
<th>Performance Index</th>
<th>Percent Proficient</th>
<th>Achievement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong school</td>
<td>5.16</td>
<td>4.32</td>
<td>4.92</td>
<td>4.88</td>
</tr>
<tr>
<td>Average school</td>
<td>3.21</td>
<td>3.24</td>
<td>3.34</td>
<td>3.32</td>
</tr>
<tr>
<td>Weak school</td>
<td>1.85</td>
<td>2.14</td>
<td>2.20</td>
<td>2.08</td>
</tr>
</tbody>
</table>

Empirical Strategy

Because our study benefited from an experimental design, we used ANOVA estimates to investigate whether data format influenced a respondent’s satisfaction. One-way ANOVA analyses highlighted whether the means of the outcome variable were significantly different based on the assigned treatment condition. ANOVAs showing significance provided reason to investigate differences on a treatment-by-treatment basis. Therefore, if ANOVA analyses showed significance, we examined specific condition-by-condition differences utilizing t-tests to more precisely identify which formats were driving perceptual differences.

Results

Descriptive Results

As shown in table 4, regardless of condition, respondents reported higher levels of satisfaction for the strong school and lower levels of satisfaction for the weak. Thus, respondents were able to distinguish between high- and low-performing schools to some extent across all conditions. While the strong school consistently received higher satisfaction ratings, it received the highest rating from those who viewed the letter grade data format (5.16) and the lowest rating from those who viewed the performance index data format (4.32). Similarly, respondents seem to hold different levels of satisfaction for the weak school based on their assigned condition. Respondents who viewed the percent proficient expressed the highest level of satisfaction with the weak school (2.20), while respondents viewing the letter grade format expressed the lowest level of satisfaction (1.85). While it appears that format influenced the perceptions of school quality for the strong school and weak school, the satisfaction ratings for the average-performing school are nearly uniform across condition. There is only a small amount of variation between the conditions for the average-
performing school (just 0.13 points). This suggests that the format of the data may play a significant role in shaping perceptions of school quality when schools are either excelling or struggling (see table 4).

In addition to affecting the average satisfaction rating across conditions, it appears that the format of school performance data impacts the degree of difference respondents perceived between the schools. For example, when compared to the other conditions, respondents who viewed the letter grades expressed both higher levels of satisfaction with the strong school and lower levels of satisfaction with the weak school, resulting in a greater spread of ratings across the schools. In other words, respondents perceived a wider range of performance between the schools; respondents saw the good school as really good and the bad school as really bad. Specifically, the variance between the strong school and the weak school for the letter grade condition was 3.31 points, which is substantively quite large on a 7-point scale.

Letter grades are likely a very familiar format, enabling respondents to more easily interpret performance differences between schools. Conversely, respondents viewing the performance index format perceived the schools as more similar in performance, thus narrowing the range of satisfaction scores. Using the means reported in table 4, the spread for the performance index condition was just 2.18, over a whole point less than the letter grade format. Unlike the very familiar letter grades, the performance index rating is likely unfamiliar and appears to make it more difficult to distinguish between high- and low-performing schools, resulting in a clustering of scores around the median. Respondents may have been uncertain how to interpret the index score and thus assigned neither high nor low marks, instead opting for moderate ratings across all schools. While familiarity with this format may grow over time, this format results in a very different interpretation of school performance than the more familiar letter grades.

**Statistical Results**

To test whether the above descriptive differences were significant, we ran a one-way ANOVA. Table 5 reports results from ANOVA estimates. Using the average satisfaction rating for each school as the response and assigned format condition as the factor, the ANOVA results demonstrate that condition significantly influences reported satisfaction levels; however, the effect is only found for the strong and weak schools. In particular, the large mean squares score (or estimate of the variance) for the strong school suggests that there is far more variation in the ratings assigned between conditions than there is within condition. While the ANOVA results also suggest that the mean differences between conditions for the weak school are significant and cannot
TABLE 5

ANOVA Results

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with strong</td>
<td>105.6946</td>
<td>35.2315</td>
<td>17.90**</td>
</tr>
<tr>
<td>Satisfaction with middle</td>
<td>3.2967</td>
<td>1.0989</td>
<td>.61</td>
</tr>
<tr>
<td>Satisfaction with weak</td>
<td>19.4938</td>
<td>6.4979</td>
<td>4.45*</td>
</tr>
</tbody>
</table>

Note.—Satisfaction variables are the response variable for each model. The factor variable for each model is condition with df = 3.

* $p < .05$.

** $p < .01$.

be attributed to chance, the strength of the relationship is weaker than it is for the strong school, as indicated by the much smaller $F$ ratio. Finally, as expected, we find no significant differences in the ratings assigned across conditions for the performance of the average school.

While the ANOVA results indicate significant differences exist between conditions, it is not specific: we only know that a significant difference exists for at least one of the conditions for the strong and weak schools. Therefore, we explore condition-by-condition differences through unpaired $t$-tests to isolate which conditions are having a differential effect on opinions. Table 6 shows results from $t$-tests comparing combinations of conditions within school groupings.

Strong-performing school.—As indicated in both our descriptive review of the data and in our ANOVA results, format had the most significant impact on the perceived quality of the strong school. For those in the letter grade condition, the average satisfaction rating for the strong school was significantly higher when compared to each of the other conditions (see rows 1, 4, and 5 in table 5). Specifically, those in the letter grade condition awarded a score that was, on average, a quarter point higher than those in the percent meeting a goal and the achievement level conditions. It seems that people associate the grade of A with even higher levels of performance than the “advanced” achievement rating, or having 95% of students meeting a goal. When compared to those in the performance index condition, the difference is over eight-tenths of a point. On a 7-point scale, this represents a fairly substantial difference. This large difference suggests that an A grade indicates much higher levels of performance to the public than an index rating of 190 out of 200.

Additionally, those who viewed the performance index rating had significantly lower levels of satisfaction with the strong school than those in either of the other conditions (see rows 2 and 3 in table 5). When compared to both percent meeting goal and achievement level conditions, average satisfaction with performance indices is over a half point lower. For the strong school,
### TABLE 6

<table>
<thead>
<tr>
<th>School and Comparison</th>
<th>N₁</th>
<th>Mean₁</th>
<th>SD₁</th>
<th>N₂</th>
<th>Mean₂</th>
<th>SD₂</th>
<th>SE</th>
<th>t Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI vs. LG</td>
<td>278</td>
<td>4.31595</td>
<td>1.48052</td>
<td>265</td>
<td>5.16226</td>
<td>1.29396</td>
<td>.11956</td>
<td>-7.07865**</td>
</tr>
<tr>
<td>PI vs. PM</td>
<td>278</td>
<td>4.31595</td>
<td>1.48052</td>
<td>286</td>
<td>4.92249</td>
<td>1.40409</td>
<td>.12147</td>
<td>-4.99327**</td>
</tr>
<tr>
<td>PI vs. AL</td>
<td>278</td>
<td>4.31595</td>
<td>1.48052</td>
<td>267</td>
<td>4.88202</td>
<td>1.42331</td>
<td>.12449</td>
<td>-4.54732**</td>
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<tr>
<td>LG vs. PM</td>
<td>265</td>
<td>5.16226</td>
<td>1.29396</td>
<td>286</td>
<td>4.92249</td>
<td>1.40409</td>
<td>.11530</td>
<td>2.07955*</td>
</tr>
<tr>
<td>LG vs. AL</td>
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<td>5.16226</td>
<td>1.29396</td>
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<td>4.88202</td>
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<td>1.40409</td>
<td>267</td>
<td>4.88202</td>
<td>1.42331</td>
<td>.12028</td>
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</tr>
<tr>
<td><strong>Average:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI vs. LG</td>
<td>278</td>
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<td>1.31544</td>
<td>265</td>
<td>3.21384</td>
<td>1.23789</td>
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<td>.19297</td>
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<tr>
<td>PI vs. PM</td>
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<td>1.31544</td>
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<td>1.45208</td>
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<tr>
<td>PI vs. AL</td>
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<td>1.31544</td>
<td>267</td>
<td>3.32459</td>
<td>1.33807</td>
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<tr>
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<td>1.23789</td>
<td>287</td>
<td>3.34030</td>
<td>1.45208</td>
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<td>LG vs. AL</td>
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<td>1.23789</td>
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<td>3.32459</td>
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<tr>
<td>PM vs. AL</td>
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<td>3.32459</td>
<td>1.33807</td>
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<td>.13212</td>
</tr>
<tr>
<td><strong>Weak:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI vs. LG</td>
<td>279</td>
<td>2.13501</td>
<td>1.14309</td>
<td>265</td>
<td>1.84528</td>
<td>1.12440</td>
<td>.09727</td>
<td>2.97843**</td>
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<tr>
<td>PI vs. PM</td>
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<td>2.13501</td>
<td>1.14309</td>
<td>287</td>
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<td>1.29168</td>
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<tr>
<td>PI vs. AL</td>
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<td>.48976</td>
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<td>LG vs. PM</td>
<td>265</td>
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<td>1.12440</td>
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<td>2.20035</td>
<td>1.29168</td>
<td>.10345</td>
<td>-3.43233**</td>
</tr>
<tr>
<td>LG vs. AL</td>
<td>265</td>
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<td>1.12440</td>
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<td>1.25953</td>
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<td>-2.30918*</td>
</tr>
<tr>
<td>PM vs. AL</td>
<td>287</td>
<td>2.20035</td>
<td>1.29168</td>
<td>266</td>
<td>2.08459</td>
<td>1.25953</td>
<td>.10863</td>
<td>1.06568</td>
</tr>
</tbody>
</table>

Note.—PI = performance index condition; LG = letter grade condition; PM = percent meeting goal condition; AL = achievement level condition.

* p < .05.
** p < .01.

only the comparison between those in the percent meeting goal condition and those in the achievement level condition resulted in no significant difference in perceived satisfaction with the performance.

*Middle-performing school.*—We were unable to find significant differences between reported satisfaction levels and the assigned condition for middle-performing schools, which is in contrast to our findings for strong and weak schools. As expected, t-test results confirmed that respondents were not more or less satisfied with our average-performing schools.

*Weak-performing school.*—We find significant differences in the average ratings for the weak school between just three of the condition comparisons. Respondents who viewed data in the letter grade format expressed the strongest response, which is similar to our finding for the strong school. They rated the weak school as having significantly lower performance when compared to the three other condition formats (see rows 13, 16, and 17 in table 5), though these differences are all moderately small. The average letter grade rating was
just over one-quarter of a point lower than the other conditions (vs. PI = −0.29, vs. PM = −0.35 and vs. AL = −0.23). Thus, it seems that people perceive a C rating as an indication of worse performance than all other conditions, one carrying even more stigma than being rated “basic” on the achievement level scale. All other conditions had no significant differences in average satisfaction.

Discussion

Producing school performance data is a popular reform strategy filled with many promises, including informing citizens who can then better judge their public school system. While a significant body of research has developed our understanding of the ways in which schools, districts, and teachers are using these data (e.g., Coburn and Turner 2012; Spillane 2012), less attention has been paid to the ways the public is using and being influenced by these data. A small but growing body of research demonstrates that the broader public is paying attention to these data, including how they affect their satisfaction with public services (Charbonneau and Van Ryzin 2012), how they influence the housing market (Black 1999; Figlio and Lucas 2004), how they influence private contributions to schools (Figlio and Kenny 2009), and how they affect trust in government (Van Ryzin et al. 2004). Here, we add to this growing body of literature by demonstrating that policy decisions regarding data dissemination can have profound effects on public perception.

We find that public perception of school performance, particularly for our strong and weak school, can be influenced by the format in which data are presented. For the strong school, the letter grade format leads to strongly positive views of school performance, while other formats lead to positive but more mediocre views of school performance. While we may have expected the numerical formats to be more influential due to cultural notions about numbers being accurate and precise (Stone 2002), our consistent and strong results for the letter grade condition suggest that other cultural measures can have a much stronger influence. It appears people believe an A indicates very high performance and a C indicates quite low performance, while the numbers are more ambiguous.

Implications for Practice

School principals and teachers should be aware of these differential impacts. They will likely be the first to hear from concerned citizens after report cards are released. Understanding these differences may better prepare them to
Public Perceptions of School Quality

anticipate public assessments and respond accordingly. If the underlying performance management system is designed to limit the number of top grades and instead issue Bs and Cs to represent adequate progress in student achievement (as is the case in New York City), having teachers and principals aware of the strong influence these grades have on opinions may enable them to assist parents and the public in understanding the intended interpretation to avoid unwarranted criticism of their particular school.

Implications for Policy

Moreover, we demonstrate that report card format can significantly influence the variation that is perceived between schools. The letter grade format in particular caused people to perceive greater differences between the schools, while those who viewed the performance index format perceived that all three schools were performing more similarly. In part, the difference between the numerical conditions and the letter grade conditions may not be so surprising. After all, there are only five categories and it is relatively easy to remember the rank order (Coe and Brunet 2006). This ease of comprehensibility is one of the key factors determining whether data dissemination policies have an impact on behavior (Fung et al. 2007). Yet when letter grades are compared to the achievement level condition, which is ostensibly equally easy to understand (just five categories, also with a straightforward ranking), it appears that people see greater differences between letter grades than they do between words such as “advanced,” “proficient,” and “basic.” This may be due to the fact that the meaning behind letter grades is ingrained in citizens from their own schooling experiences, thus carrying more weight in their minds.

Blunting or enhancing the ability to perceive differences between schools may be especially important when citizens assess the overall health of the education system, as they must do when they vote on tax levies and bond initiatives. If the public views the majority of its schools as performing at roughly the same level, the support for reform may be very different than if the public perceives some schools to be struggling significantly. Alternatively, the ability of the people to see pockets of excellence among its schools may be critical to ensuring ongoing faith in the education system. Policy feedback research suggests that the perceived policy problem and solution for these different interpretive scenarios, which have been shaped by policy dissemination choices, may significantly alter the future politics of education reform.

Finally, many states, following the logic that more data are better, have begun using multiple formats of data in their school report cards. Additionally, several school districts now release report cards for each school separate from and in addition to the state-issued school report card. Often, these report
cards use different formats. For example, while New York City releases a letter grade for each school, the New York State report card reports on the percent of students scoring at or above particular thresholds. Given that our results indicate that the public will interpret these formats differently, the multiple formats may only confuse people as they interpret one report to indicate the school is performing poorly, while the other is interpreted to indicate moderately successful performance. Such confusion may actually backfire, leading the public to disregard the measures. Worse yet, the public may conclude that with such differing performance indicators, the entire system is not to be trusted. While release of data is hypothesized to foster the sense of openness and transparency, thereby increasing legitimacy, these differing and potentially competing measures may, in fact, decrease the legitimacy of the public school system. Policy makers would be wise to keep this in mind as they design these systems. Therefore, policy makers ought to proceed cautiously as they pursue policies that publicize more school performance data without considering the negative consequences of such policies.

Limitations and Implications for Future Research

While our findings raise important considerations for the development of school performance report cards, like all studies, some limitations should be considered when drawing conclusions from our results. First, some may question whether the public even pays attention to these data. Current policies and the underlying theory assume “that the availability and quality of performance data is not just a necessary condition for use, but also a sufficient one” (Moynihan 2008, 5). It is plausible to imagine that in the “age of information,” school performance data are short-lived in the minds of most citizens. Admittedly, we have mixed, but limited, research regarding public use of school performance data (Hastings and Weinstein 2008; Hastings et al. 2007; Hausman and Goldring 2000; Holmes et al. 2003; McDonnell 2004; Pride 2002). In some of the most recent work, however, we find growing evidence that the public is using and responding to data (Charbonneau and Van Ryzin 2012; Figlio and Loeb 2011; Jacobsen and Saultz 2013; Jacobsen et al. 2013). And places such as New York City, where extensive media reporting on school performance report cards now occurs, suggest that the public is likely more aware of these data than in previous years. Therefore, while additional work is needed in this area, we believe that the public is being influenced by the growing availability of school performance data, thus making our experimental survey important for future policy making in these areas.

A more significant limitation is the measured outcome—satisfaction. While research indicates that satisfaction is a strong predictor of future support (Beck
et al. 1987; Donahue and Miller 2006; Glaser and Hildreth 1999), it is, nonetheless, a proxy for actual citizen action. Our survey is not able to ascertain whether dissatisfied citizens actually do vote to withdraw funding from future education reform initiatives. While we have evidence from other public service sectors (i.e., police and fire) that this does, in fact, occur, we cannot provide definitive evidence that the lowered satisfaction levels detected by some format conditions actually lead to less support. Mixed methods research that combines both quantitative measures, such as those used in this study, along with qualitative case studies of citizen response over time are needed to understand the short- and long-term changes in behavior that occur as a result of these performance data dissemination policies.

Conclusion

Significant public investment in the education system makes public dissemination of data not only an intuitive policy strategy but also a key component for effective democratic control. Citizens need information in order to accurately assess the quality of public services in which they are heavily investing. Education has seen a downward trend in confidence over the past 40 years (Jacobsen 2009; Loveless 1997). While it has been assumed that this downward trend reflects dissatisfaction with actual performance, opinions are also shaped by policy choices. Such policy feedback shapes public opinion in ways that can either foster or constrain future political support for the education system. While creating and disseminating school performance data may be necessary to enhance participation in education governance, policy makers should pay increased attention to not only whether data are distributed but also how data are presented and whether we can have too much of a good thing. Ultimately, the measure of whether such policies are successful should be whether the effects of the policy feed back into the system in ways that lead the public to be more engaged and more thoughtful in their deliberations about school quality as they consider how best to support the public education system (Bryk and Hermanson 1993).
Appendix

Sample Survey Excerpt

Introduction to School Data

Schools today are required to provide the public with annual information on their performance. Just like students receive report cards to evaluate their performance in each subject area, schools are evaluated in different subject areas and that information is provided in a school report card. These report cards are then made publicly available through the Internet, which enables the public to judge how well schools in their area are doing to meet their educational goals.

Imagine you are asked evaluate your satisfaction with a school’s performance based on its report card data. On the following screens, you will be provided with school report card data for three high schools. After examining the report cards, you will be asked judge each school’s performance.

**CONDITION B: Letter Grades**

[Programming Note: Order of Schools Should Be Randomized]

_School 1._—Below are report card data for Oak High School. The performance of the students at Oak High School has been measured and the resulting letter grades have been earned for each area. Letter grades include A, B, C, D and F. Considering the provided data, please answer the accompanying questions.

<table>
<thead>
<tr>
<th>Educational Goal</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics</td>
<td>B</td>
</tr>
<tr>
<td>Arts</td>
<td>A</td>
</tr>
<tr>
<td>Citizenship and community responsibility</td>
<td>A</td>
</tr>
</tbody>
</table>

**Question 1.**—Satisfaction means many things. Overall, how SATISFIED are you with Oak High School based on these data? (Radio buttons 1–7, 1 = very dissatisfied; 7 = very satisfied)

**Question 2.**—Considering all of your EXPECTATIONS for the performance of a high school in your state, to what extent has the performance of Oak High School fallen short of your expectations or exceeded your expectations? (Radio buttons 1–7, 1 = fallen short of my expectations; 7 = exceeded my expectations)

**Question 3.**—Imagine the IDEAL high school for you and your household.
How well do you think Oak High School compares with your ideal? (Radio buttons 1–7, 1 = very far from my ideal; 7 = very close to my ideal)

School 2.—Below are report card data for Elm High School. The performance of the students at Elm High School has been measured and the resulting letter grades have been earned for each area. Letter grades include A, B, C, D and F. Considering the provided data, please answer the accompanying questions.

Elm High School

<table>
<thead>
<tr>
<th>Educational Goal</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics</td>
<td>C</td>
</tr>
<tr>
<td>Arts</td>
<td>B</td>
</tr>
<tr>
<td>Citizenship and community responsibility</td>
<td>B</td>
</tr>
</tbody>
</table>

Question 4.—Satisfaction means many things. Overall, how SATISFIED are you with Elm High School based on these data? (Radio buttons 1–7, 1 = very dissatisfied; 7 = very satisfied)

Question 5.—Considering all of your EXPECTATIONS for the performance of a high school in your state, to what extent has the performance of Elm High School fallen short of your expectations or exceeded your expectations? (Radio buttons 1–7, 1 = fallen short of my expectations; 7 = exceeded my expectations)

Question 6.—Imagine the IDEAL high school for you and your household. How well do you think Elm High School compares with your ideal? (Radio buttons 1–7, 1 = very far from my ideal; 7 = very close to my ideal)

School 3.—Below are report card data for Cedar High School. The performance of the students at Cedar High School has been measured and the resulting letter grades have been earned for each area. Letter grades include A, B, C, D and F. Considering the provided data, please answer the accompanying questions.

Cedar High School

<table>
<thead>
<tr>
<th>Educational Goal</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics</td>
<td>D</td>
</tr>
<tr>
<td>Arts</td>
<td>C</td>
</tr>
<tr>
<td>Citizenship and community responsibility</td>
<td>C</td>
</tr>
</tbody>
</table>

Question 7.—Satisfaction means many things. Overall, how SATISFIED are you with Cedar High School based on these data? (Radio buttons 1–7, 1 = very dissatisfied; 7 = very satisfied)

Question 8.—Considering all of your EXPECTATIONS for the performance of a high school in your state, to what extent has the performance of Cedar
High School fallen short of your expectations or exceeded your expectations? (Radio buttons 1–7, 1 = fallen short of my expectations; 7 = exceeded my expectations)

Question 9.—Imagine the IDEAL high school for you and your household. How well do you think Cedar High School compares with your ideal? (Radio buttons 1–7, 1 = very far from my ideal; 7 = very close to my ideal)

Notes

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1. The data for this manuscript were collected in the fall of 2012. Since this time, several states have changed their report card format. Thus, in some instances where we cite specific states, the data format may have changed. However, the data formats discussed remain most common. Further, the fact that so many states are changing their performance reporting makes our findings even more timely and important to current policy.

2. This is not the only outcome possible; individuals with children who become dissatisfied with a school may opt to exit the school and/or the district, thereby decreasing the amount of funding available. Additionally, dissatisfied individuals may decide to voice their complaints directly to school officials. However, while we see these as important outcomes, these options are more available (or only available, in the case of school choice) to individuals with school-aged children. Because this study focuses on broader public response, we focus this discussion on the removal of support in the form of financial and political resources, an option available to all individuals regardless of parental status.

3. KnowledgePanel respondents are recruited to join the panel through a random-digit-dial technique, which has a recruitment rate of 15.2%. To calculate the cumulative response rate, the final stage response rate must be multiplied by the recruitment response rate. Thus, the cumulative response rate for this study is 9.2%.

4. One-way ANOVAs with demographic variables as our response variable and condition as a factor variable for the demographics (race, age, education, income, gender, marital status, employment status, metropolitan statistical area [MSA] status, geographical region, presence of school-aged child, political party, and ideology) had no significant effect, so we can assume that these demographics were evenly distributed among conditions.

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