Are existing systems too narrow?

Is demography destiny?

Can surveys be used for accountability?
Literature Review

Current accountability systems

- don’t reflect the full breadth of how Americans view school quality (Schneider, 2017; Rothstein & Jacobsen, 2006)
- produce unintended consequences (Hamilton et al., 2002; Koretz, 2008; Lowe & Wilson, 2017; Dee et al., 2013; Jennings & Sohn, 2014)
- are highly correlated with student background characteristics (Davis-Kean, 2005; Hegedus, 2018; Reardon, 2011)

Student perception surveys

- have been used as a valuable source of information in school improvement (e.g. Tripod Student Survey, Consortium on Chicago School Research, California Office to Reform Education districts)
- show promise as a measure of school quality (Every Student Succeeds Act, 2015)

How -- if at all -- does adding student voice, in the form of student perception surveys, alter these accountability systems?
Data Sources

Massachusetts Consortium for Innovative Education Assessment (MCIEA)

- Collaborative project committed to the development and piloting of broader school quality measures—including student perception surveys
- Surveys address various dimensions of school quality not presently measured by the state but identified as relevant by community, school, and district stakeholders
- Final sample included 100 K-8 schools

Massachusetts Department of Elementary and Secondary Education

- Accountability formula weights absolute achievement at 67.5%, growth in achievement at 22.5%, and chronic absenteeism at 10%
Measure Construction

- We created an overall survey measure for each school using principal component analysis.
- Next, we calculated an overall accountability score for each school using the most recent accountability formula from Massachusetts Department of Elementary and Secondary Education.
- Both measures were expressed as percentiles relative to the sample.
- Then, we created a new accountability formula comprised of survey scores weighted at 25%.
- We weighted the existing accountability formula at 75%, conserving DESE’s relative weights.
- Analysis
<table>
<thead>
<tr>
<th>Shift, in percentile points</th>
<th>Number of schools</th>
<th>% Economically disadvantaged</th>
<th>% Black/Latinx</th>
<th>% Special education</th>
<th>% English language learners</th>
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</thead>
<tbody>
<tr>
<td>Up 9 or more</td>
<td>10</td>
<td>60.7</td>
<td>80.5</td>
<td>20.5</td>
<td>37.6</td>
</tr>
<tr>
<td>Up 5 to 8</td>
<td>14</td>
<td>51.8</td>
<td>67.1</td>
<td>19.1</td>
<td>33.1</td>
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<tr>
<td>Up 1 to 4</td>
<td>28</td>
<td>51.4</td>
<td>59.9</td>
<td>18.8</td>
<td>25.2</td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td>59.2</td>
<td>69.3</td>
<td>20.8</td>
<td>29.9</td>
</tr>
<tr>
<td>Down 1 to 4</td>
<td>16</td>
<td>49.3</td>
<td>61.3</td>
<td>21.3</td>
<td>30.1</td>
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<tr>
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<td>17</td>
<td>44.2</td>
<td>52.7</td>
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<tr>
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<td>35.5</td>
<td>41.4</td>
<td>15.2</td>
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</tr>
</tbody>
</table>

Note. Survey weight derived from 2016–2017 survey results of 18,927 students in Grades 4 through 8 from 100 non-high schools in Massachusetts. Other data from Massachusetts Department of Elementary and Secondary Education (n.d.).
Three Key Takeaways

- Student surveys appear to add new information to the public’s understanding of school quality.
- Student survey data were weakly correlated with achievement scores and chronic absenteeism, which are strongly correlated with student demographics.
- Adding more measures may make accountability systems harder to game.

One Key Caveat

- Adding surveys into a high stakes system may distort results in ways we cannot fully predict.
Are existing systems too narrow?  Yes.

Is demography destiny?  Perhaps not.

Can surveys be used for accountability?  Yes, but...
Thank you

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• Preserved NCLB standards and testing requirements
• Directed states to incorporate one “non-academic” measure into state accountability systems
• Required that academic measures be given “much greater weight” in accountability determinations

• Required states to develop measures of “Annual Yearly Progress” (AYP), based on annual testing in math and reading, plus graduation requirements in high school and one other measure (such as attendance) in elementary schools
• Schools most likely to be identified as “needs improvement” tended to serve high proportions of students of color