Learning from Peers on a Large Scale

Teachers in High-Poverty Schools Find Value in Results of National Educator Surveys

Teachers in the United States are encouraged to continuously improve their teaching practice; one method of doing so is by learning from peers. Learning from peers can take many forms, such as collaborating formally or informally (e.g., classroom observations, reviewing student work, professional learning communities), accessing research results through professional networks, or seeking guidance from peers about interventions and instructional strategies.¹ Many opportunities for peer-to-peer learning occur through one-to-one or small-group interactions. Larger-scale opportunities for learning, such as conferences and online communities, may be useful channels for building peer connections, but they are unlikely to provide teachers with systematic information about what their peers are doing nationally. We know little about the extent to which teachers would find nationwide information about their peers’ teaching practices useful, as little research exists describing which topics might be perceived as useful for reflection and improvement. In addition, we do not know how school characteristics (e.g., school poverty, urbanicity, grade-level configuration) affect teachers’ perceptions of the usefulness of such information.

¹ Johnston and Tsai, 2018; Coburn and Talbert, 2006; Helmsley-Brown and Sharp, 2004; Hamilton and Hunter, 2019.

Nationally representative data from the RAND Corporation’s web-based American Teacher Panel (ATP) survey provide more insight into the degree to which teachers believe national survey data would be useful for improving their practice and the extent to which their perceptions vary by school characteristics. The survey asked a nationally representative sample of teachers the following question:

- How useful would data on how other teachers responded be for you and others at your school to reflect upon and think about how to improve your teaching practice?

Respondents were asked to rate the usefulness of national survey data on seven topics (supporting students with high-incidence disabilities, interventions to support student outcomes, curriculum, teacher/leader preparation, data system use, pathways to postsecondary education, and social and emotional learning) that were the focus of the larger survey instrument as totally useless, slightly useful, somewhat useful, or very useful. Although the question focused on the topics included in this particular survey, results from this large, nationally representative sample provide a unique opportunity to gain insight into teachers’ use of peer responses in informing their own practice.
National Survey Data Would Be Useful to Teachers for Thinking About How to Improve Their Practice

Large majorities of teachers reported that data on how other teachers responded to these survey questions would be somewhat or very useful for reflecting on and improving their teaching practice. More than 80 percent of teachers reported that survey data about social and emotional learning, interventions to support student outcomes, curriculum, and supporting students with high-incidence disabilities would be useful (Table 1). Among this list of topics, survey data on teacher preparation were perceived as least useful for reflecting upon and thinking about improving practice, but the item was still endorsed by 70 percent of teachers.

Teachers in Higher-Poverty Schools Were More Likely to Report National Survey Data Would Be Useful

We examined the variation in these results by school characteristics and found that teachers’ responses differed by school poverty level. Teachers in higher-poverty schools were significantly more likely to report that national survey data on many of these topics would be somewhat or very useful for improving their instruction than teachers in lower-poverty schools (see Figure 1). Differences by school poverty level were largest for survey data on teacher preparedness.

2 For this exploratory analysis, we considered differences based on multiple characteristics of the schools where respondents were employed, including grade level, racial/ethnic composition, and urbansity. School poverty level was the only indicator that had a consistent pattern of associations with survey responses.

<table>
<thead>
<tr>
<th>How useful would data on how other teachers responded be for you and others at your school to reflect upon and think about how to improve your teaching practice?</th>
<th>Percentage of teachers responding “somewhat” or “very” useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and emotional learning</td>
<td>89</td>
</tr>
<tr>
<td>Interventions to support student outcomes</td>
<td>88</td>
</tr>
<tr>
<td>Curriculum</td>
<td>84</td>
</tr>
<tr>
<td>Supporting students with high-incidence disabilities</td>
<td>83</td>
</tr>
<tr>
<td>Pathways to postsecondary educationa</td>
<td>73</td>
</tr>
<tr>
<td>Data system use</td>
<td>72</td>
</tr>
<tr>
<td>Teacher/leader preparation</td>
<td>70</td>
</tr>
</tbody>
</table>

a Elementary school teachers are excluded from this item.
preparation, data system use, curriculum, and pathways to postsecondary education. For example, 75 percent of teachers in high-poverty schools reported that they would find national survey data related to teacher preparation useful, compared with 65 percent of teachers in low-poverty schools.

FIGURE 1
Teachers in Higher-Poverty Schools Were More Likely to Indicate That Survey Results Would Be Useful For Improving Their Instruction

NOTE: Asterisks indicate that differences are statistically significant based on a weighted linear probability model; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. 
Why Might School Context Matter?

We found some evidence that teachers in higher-poverty schools were more likely to perceive national teacher survey data on a variety of topics as useful for reflecting upon and thinking about how to improve their practice than teachers in lower-poverty schools. The ATP data do not allow us to examine why this gap might exist, but we offer several hypotheses.

First, it is possible that high-poverty schools could attract teachers who are more inclined to place a higher value on national survey responses for reflection and practice improvement than teachers in low-poverty schools. Teachers in high-poverty schools that are low-performing, for example, might feel pressure from accountability policies to improve their practice. Teachers in high-poverty schools tend to have fewer years of teaching experience than teachers in low-poverty schools and therefore may be more interested in novel data sources that could help them improve their practice.3 Less experienced teachers may also be more recent graduates of preparation programs, and these programs may have had more of a focus on data use. There is some evidence that teachers in high-poverty schools are more likely to value rigorous evidence when selecting interventions; perhaps this desire for high-quality data extends to an interest in national survey data.4

Second, the school or organizational environment in high-poverty schools may encourage teachers to value national survey data or reflection and practice improvement more generally. High-poverty schools may receive additional funding (e.g., through Title I) that can be used to support instructional improvement; schools could use these funds in ways that introduce teachers to research-use practices. High-poverty schools also may have structures and practices that support teachers learning from their peers; an earlier ATP survey found that, compared with teachers in low-poverty schools, teachers in high-poverty schools reported receiving more-frequent feedback from a mentor or coach and from principals in the context of evaluation systems.5

Discussion

Teachers report that they would find their peers’ responses on a range of topics in a national survey useful for thinking about how to improve their practice. Teachers in high-poverty schools appear to be more likely than teachers in low-poverty schools to report that they would find such data useful. One thing to remember is that the ATP survey question asked educators about the usefulness of survey data on only the seven topics included in the survey. It is possible that these findings cannot be generalized and that national survey data on other topics would be perceived as more useful or less useful. In addition, ATP respondents did not have the actual survey data in front of them when responding to this question; if given the opportunity to examine the data, teachers might change their opinions of the data’s usefulness.

The AEP data do not offer any insight about how teachers might use their peers’ national survey responses to reflect upon and improve their practice or why they believe it would be useful. The AEP data do not allow us to explore why teachers in high-poverty schools perceive this information to be more useful than their peers in low-poverty schools. We hope that future research can explore these topics in more depth. These preliminary results suggest that researchers who collect and analyze national survey data, and funders and policymakers who use and disseminate such data, should consider making the results—particularly if they address any of the topics included in the AEP—available directly to teachers.

3 Clotfelter et al., 2007.
4 Hamilton and Hunter, 2019.
How This Analysis Was Conducted

For each question, we collapsed the responses recorded in the four-category usefulness scale (totally useless, slightly useful, somewhat useful, or very useful) into a dichotomous indicator, with somewhat useful and very useful representing an affirmative response and slightly useful or totally useless representing nonaffirmative responses. The primary analyses were conducted using weighted linear probability models to compare the responses of teachers across the set of questions regarding their interest in data from national surveys. To compare responses for teachers in schools with varying levels of student poverty, we created four categories of school poverty based on the schools’ percentage of students receiving free or reduced-price lunch. We used cut-off points of 25 percent, 50 percent, and 75 percent. We also followed the naming conventions of the National Center for Educational Statistics by naming these categories low, mid-low, mid-high, and high poverty.1 We conducted supplemental analyses to ensure that differences by teacher role, urbanicity, and poverty were not driven by school characteristics or differences in the school context. In these analyses, we controlled for a limited set of covariates that included indicators for elementary school, urban school, and school size, as well as state fixed effects. We opted not to control for a larger set of covariates to avoid controlling for student characteristics that are highly correlated with poverty and could contribute to differences in responses. After controlling for these variables, we still found a statistically significant association between perceived usefulness of data and school poverty for curriculum, data system use, pathways to postsecondary, and teacher preparation.

About the AEP Data Note Series
The AEP Data Note series is intended to provide brief analyses of teacher and school leader survey results of immediate interest to policymakers, practitioners, and researchers. If you would like to know more about the dataset, please see the Technical Appendix (RR-2575/10-BMGF, www.rand.org/t/RR2575z10) for more information on survey recruitment, administration, and sample weighting. If you are interested in using AEP data for your own analysis or reading other AEP-related publications, please email aep@rand.org or visit www.rand.org/aep.

Bibliography


About This Report
The American Educator Panels (AEP) are nationally representative samples of teachers and school leaders across the country.

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, financial literacy, and decisionmaking. This study was sponsored by The Bill & Melinda Gates Foundation, which focuses on ensuring that all students graduate from high school prepared for college and have an opportunity to earn a postsecondary degree with labor-market value. For more information, please visit www.gatesfoundation.org.

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