School Improvement Plans: Is There Room for Improvement?

School Improvement Plans (SIPs) have been a central feature of American school reform for more than two decades. They serve as organizing documents that detail educators’ goals for improving educational practice and student outcomes and the initiatives they will implement to achieve those goals. Although the effectiveness of SIPs has not been extensively studied, researchers have found correlations between well-designed SIPs and improved school processes (such as planning) and student outcomes.

For SIPs to lead to school improvement, they must focus on common goals and related initiatives, factors that have been found critical for successful school reform. Educators must be aware of the details of their school’s SIP and accept its stated goals and reform efforts. However, organizational focus and cohesion in working toward common, schoolwide goals do not necessarily exist within schools. In fact, research in some states and districts has found that educators’ perspectives on the effectiveness of SIPs can vary by their position in the school.

SIPs are Common and Educators are Familiar with Their SIPs

About 91 percent of principals and 86 percent of teachers reported having a SIP at their school. Figure 1 shows that the majority of educators (99 percent of principals and 75 percent of teachers) in schools with SIPs reported being familiar with their particular SIP’s major points. However, a large and significant 24-percentage-point gap in knowledge between principals and teachers still exists.

We use the RAND Corporation’s web-based American Educator Panels (AEP) to ask a nationally representative sample of educators about their awareness of their school’s SIP and their attitudes toward the effectiveness of SIPs in changing instruction and school quality. We then examine how those responses vary by position. We asked teachers and principals to indicate whether their school has a SIP, and if so, whether they agreed with the following statements:

1. I am familiar with most of the major points of our SIP.
2. The SIP has led to changes in my teachers’ (my) teaching practices.
3. The SIP will help make us a better school over the next five years.

A four-point Likert scale was dichotomized into indicators of agreement (strongly and somewhat agree versus strongly and somewhat disagree).
Although educators show a high awareness of the SIPs’ major points, teachers and principals had differing perspectives on the ability of SIPs to effect change in instruction and school quality. As Figure 1 demonstrates, principals were much more optimistic about the role of the SIP in the school improvement process than were teachers. Eighty-one percent of principals reported that their SIP would help improve their schools over the next five years, compared with only 62 percent of teachers. Similarly, 67 percent of principals believed that their SIP had led to improved teaching practices, but only 44 percent of teachers agreed. These differences in principal and teacher responses persist regardless of urbanicity, poverty level, or school size.

**FIGURE 1**

*Both Teachers and Principals Are Familiar with Their SIPs, Have Different Buy-In Levels*

Percentages of Educators Agreeing with Statements Concerning SIPs

<table>
<thead>
<tr>
<th>Statement</th>
<th>Principals</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am familiar with most of the major points in our SIP</td>
<td>99%</td>
<td>75%</td>
</tr>
<tr>
<td>The SIP has led to changes in my teachers’ (my) teaching practices</td>
<td>67%</td>
<td>44%</td>
</tr>
<tr>
<td>The SIP will help make us a better school over the next five years</td>
<td>81%</td>
<td>62%</td>
</tr>
</tbody>
</table>

NOTE: Vertical bars represent weighted 95-percent confidence intervals. Asterisks indicate results of a linear probability model used to estimate differences among teachers and school leaders: ***$p<0.001$. 

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**How This Analysis Was Conducted**

To ease interpretability, we collapsed the four-point Likert scale into dichotomous indicators for agreeing with the statement (strongly and somewhat agree versus strongly and somewhat disagree). The primary analyses were conducted using linear probability models that included sampling weights to compare the responses of teachers and principals. We also conducted supplemental analyses that included many additional covariates and a vector of state fixed effects to better understand whether the associations found in the primary analysis were potentially confounded by characteristics of the schools or respondents. Results were robust to these weighted, multivariate linear probability models that included a series of demographic control variables from the National Center for Education Statistics Common Core of Data.  

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1 These included school-level variables, such as urbanicity; percentage free and reduced-price lunch; percentage white, black, and Hispanic; school size; an indicator for elementary school; district-level variables, such as percentage English language-learner students and special education students; and state-level fixed effects.
Teacher Knowledge of the SIP Predicts Their Attitudes Toward SIP Effectiveness

Teacher perceptions of SIP effectiveness in changing their practices or improving their schools vary dramatically based on whether teachers are familiar with the major points of their SIPs. Figure 2 shows that, among teachers who are not familiar with the major points of their SIPs, only 12 percent believe that their SIP will change their teaching practice. In contrast, among teachers who are familiar with their SIPs, more than half believe that their SIP will change their practice. Similarly, 30 percent of teachers unfamiliar with their SIPs believe that their SIPs will improve their school over five years, while 72 percent of teachers who are familiar with their SIP believe that to be the case—a difference of 42 percentage points. Teachers who are aware of their SIPs therefore have more similar views to those of principals, although for each question, responses between the two groups still differ by about 10 percentage points.5

5 We did not look at how principal perceptions differ by knowledge of their SIP because the number of principals who reported being unaware of their SIP was extremely small.

Discussion

We find evidence that the majority of schools have SIPs, and both teachers and principals have an understanding of SIPs within their schools. However, principal and teacher perspectives regarding the ability of SIPs to create changes in instruction and school quality differ, and teacher perceptions of SIPs vary dramatically based on their knowledge of the SIP.

These results suggest that a lack of teacher knowledge may be one major impediment to proper SIP use. Teachers who reported being aware of the major points of their SIP were 40 percentage points more likely to believe that it changed their practice and will improve the school. However, a substantial number of teachers—25 percent—reported being unaware of those major points.

Even among the subset of teachers that were aware of the major points and had a more favorable view of their SIP, up to 45 percent doubted that the SIP would induce changes in teacher practice or school functioning. Notably, teacher results do not vary based on grade or subject taught, indicating that negative responses are probably not tied to any

FIGURE 2
Percentages of Teachers Agreeing with Statements on the Effects of SIPs, by Familiarity with the SIP

<table>
<thead>
<tr>
<th>Statement</th>
<th>Familiar with Major Points of SIP</th>
<th>Not Familiar with Major Points of SIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>The SIP has led to changes in my teachers’ (my) teaching practices***</td>
<td>55%</td>
<td>12%</td>
</tr>
<tr>
<td>The SIP will help make us a better school over the next five years***</td>
<td>72%</td>
<td>30%</td>
</tr>
</tbody>
</table>

NOTE: Vertical bars represent weighted 95-percent confidence intervals. Asterisks indicate results of a linear probability model used to estimate differences among teachers and school leaders: ***p < 0.001.
specialized initiatives contained in SIPs that may affect the work of only a subset of teachers. The quality of the SIP, or the ability of the school to carry out the goals enumerated in the SIP, could be two reasons for negative perceptions. Furthermore, perceptions of that subset of teachers still lag the overall principal perception of SIPs by about 10 percentage points, indicating some disagreement over the quality or content of the SIP. More research needs to be done to understand why a substantial number of educators doubt the efficacy of their SIPs.

Past research has suggested that variation in the quality of SIPs may prevent meaningful change from occurring in some cases. Even with high-quality plans, teacher buy-in and ownership is a feature of successful school improvement efforts. Our results suggest that both of these issues may be at play, but important variations in the underlying reason exist among populations of teachers. In all cases, our findings support the notion that, if SIPs are used to organize and coordinate school improvement efforts, school leaders must ensure that teachers are aware of the SIP, work with teachers to find broad agreement on the SIP’s contents, and ensure that the proper mechanisms are in place to carry out the work described in the SIP.

Strunk et al., 2016.

References


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-2575/1-BMGF, www.rand.org/t/RR2575z1) for more information on survey recruitment, administration, and sample weighting. If you are interested in using AEP data for your own analysis or in reading other AEP-related publications, please email aep@rand.org or visit www.rand.org/aep.