The federal School Improvement Grants (SIG) program, to which $3 billion were allocated under the American Recovery and Reinvestment Act of 2009 (ARRA), supports schools attempting to turn around a history of low performance. School turnaround also is a focus of Race to the Top (RTT), another ARRA-supported initiative, which involved a roughly $4 billion comprehensive education reform grant competition for states. Given the size of these federal investments, the Institute of Education Sciences (IES) is conducting a large-scale evaluation of RTT and SIG to better understand the implementation and impacts of these programs. The SIG component, in particular, focuses on a purposive sample of SIG-eligible schools, including (1) a group of schools that received SIG to implement one of four intervention models specified by the U.S. Department of Education and (2) a comparison group of schools from the same districts that are not implementing one of these four intervention models with SIG support. Though the results from this evaluation of SIG are not necessarily generalizable to SIG schools nationwide, they are nonetheless important because they add to the limited knowledge base about the implementation and impacts of SIG-funded school turnaround efforts.

This brief focuses on the implementation of SIG by examining three interrelated levers for school improvement: (1) school operational authority, (2) state and district support for turnaround, and (3) state monitoring of turnaround efforts. SIG principles emphasize that school leaders should be given the autonomy to operate on matters such as staffing, calendars, and budgeting, but then also be appropriately supported and monitored by states and districts to ensure progress. It is thus of interest to document the actual policies and practices related to these three levers, and to see whether there are differences among the study districts, as well as between study schools implementing a SIG-funded intervention model and comparison schools not implementing a SIG-funded intervention model. Findings are based on spring 2012 survey responses from 450 school administrators and interviews with administrators in the 60 districts and 21 of the 22 states where these schools are located. Key findings include the following:

- Schools implementing a SIG-funded intervention model on average reported having primary responsibility in 2.5 out of 8 operational areas examined (2.3 for non-implementing schools). The most common area in which schools implementing and not implementing a SIG-funded intervention model reported having primary responsibility was their budgets (55 percent and 54 percent). Fewer than half of the schools in both groups reported primary responsibility in each of the other seven operational areas examined, such as student discipline policies (38 percent and 35 percent), staffing (37 percent and 46 percent), assessment policies (25 percent and 21 percent), and curriculum (18 percent and 16 percent). Schools implementing a SIG-funded intervention model were no more likely than non-implementing schools to report having primary responsibility in six of the eight areas examined. The two exceptions were: (1) setting professional development requirements (53 percent versus 39 percent) and (2) determining the length of the school day (19 percent versus 12 percent).
There was variation across districts in the average number of areas in which schools reported having operational authority, as well as variation across districts in the extent to which schools in the same district reported having similar levels of operational authority.

The most common turnaround supports that states reported providing related to developing school improvement plans (20 of the 21 states interviewed) and identifying effective improvement strategies (19 of the 21 states interviewed). These two supports were also the ones districts and schools most frequently reported receiving. Schools implementing a SIG-funded intervention model were no more likely than non-implementing schools to report receiving supports in nine of twelve areas examined, including working with parents, school improvement planning, and recruiting or retaining teachers. The three exceptions were: (1) identifying turnaround strategies (82 percent versus 65 percent), (2) identifying effective instructional leaders (61 percent versus 51 percent), and (3) supporting data use (71 percent versus 40 percent).

There was variation across districts in the number of areas in which schools implementing a SIG-funded intervention model reported receiving turnaround support relative to non-implementing schools. In some districts, schools implementing a SIG-funded intervention model reported more supports on average than schools not implementing such a model, while the reverse was true in other districts. There were also some districts in which the average number of supports the two groups of schools reported receiving was similar.

All 21 of the states interviewed reported being responsible for monitoring low-performing schools, although just 13 of them reported that districts were also responsible. State monitoring almost universally took the form of analyzing student data (21 states) and conducting site visits (20 states), and to a lesser extent having discussions with parents/community (16 states) and surveying school staff (12 states). Most states also reported that monitoring not only served accountability purposes, but also was used for formative purposes, such as to assess implementation fidelity (14 states) and identify additional supports for schools (14 states). These monitoring activities may help inform states whether stronger action is needed, such as taking over failing schools, which 11 states reported having the authority to do in the 2011–2012 school year, and placing low-performing schools in a special district focused on school improvement, which 5 states reported having the authority to do.

In recent years, there has been an increased focus on turning around our nation’s low-performing schools, with substantial investments from the U.S. Department of Education into new and continuing awards under the federal School Improvement Grants (SIG) program. Some studies suggest that low-performing schools are rarely able to produce substantial and sustained achievement gains. National statistics indicate that in the 2005–2006 school year, 9,808 Title I schools missed Adequate Yearly Progress benchmarks for at least two consecutive years, and 1,683 of these schools missed benchmarks for four consecutive years. There is also little evidence on the impact of school turnaround reforms, though some quasi-experimental studies suggest positive outcomes for schools implementing elements of the intervention models promoted by SIG. The largest body of research on turnaround, which comes from case studies,
is not of sufficient rigor to provide evidence of effects; however, these studies suggest that elements of the intervention models promoted by SIG occur frequently in turnaround schools.\textsuperscript{12}

Perlman and Redding’s \textit{Handbook on Effective Implementation of School Improvement Grants},\textsuperscript{13} provided to grantees alongside the SIG guidance from ED’s Office of School Turnaround, summarizes the theory of action underlying SIG, which includes three levers for school improvement: (1) opportunity, (2) capacity, and (3) incentives. Each of these levers corresponds to the levers explored in this brief. The first lever, opportunity for innovation, involves providing schools with the necessary operational authority to implement their school improvement strategies. The second lever emphasizes building school capacity for turnaround through supports provided by the state and district. The third lever, incentives, includes state monitoring of school progress and outcomes to provide rewards for improvement (or sanctions for lack thereof). These three levers are intended to work together. For example, state- and district-provided professional development and consulting on school improvement strategies may help schools build the capacity to effectively implement the reforms proposed under SIG and capitalize on operational authority they have been afforded. State monitoring and holding SIG schools accountable may help schools focus their autonomy on decisions closely tied to SIG goals.

While the research base on school turnaround is limited, the SIG theory of action aligns with the available information regarding promising supports for school turnaround. Some exploratory studies suggest that the systemic conditions in which schools function—including the extent of operational authority, supports, and monitoring—are associated with positive school turnaround outcomes in certain schools.\textsuperscript{14,15} School-level authority over operational decisions is associated with positive student outcomes, depending on the existence of supports to help schools use that authority well.\textsuperscript{16,17,18} Potentially promising aspects of operational authority include school-based decision making on staffing, budget, curriculum, and scheduling.\textsuperscript{19,20} The provision of targeted supports, such as training and technical assistance, may also be important to turning around low-performing schools.\textsuperscript{21} Evidence is more limited on the importance of monitoring for the success of school turnaround efforts, however.

Understanding the implementation of SIG requires not only examining the intervention models and improvement strategies implemented by schools, but also the extent to which operational authority, support, and monitoring are being used to support improvement efforts. This brief adds to the research base on school turnaround by providing descriptive information on the prevalence of these three levers for improvement in a purposive sample of states, districts, and schools. Findings are based on spring 2012 survey responses from administrators in 450 purposively-selected schools (described in more detail below), as well as interviews with administrators in the states and districts where these schools are located. These data allow us to document: (1) the extent to which low-performing schools reported having authority to make operational decisions, (2) the turnaround supports that low-performing schools and their districts reported receiving and that their states and districts reported providing, and (3) the monitoring that states reported conducting to help ensure that improvement efforts remain on track. We also examined whether there were differences across districts and between low-performing schools implementing and \textit{not} implementing SIG-funded intervention models in these areas. Though the results are not necessarily generalizable to SIG schools nationwide, they are nonetheless important because they add to the limited knowledge base about the implementation of SIG-funded school turnaround efforts.
Study Background

The American Recovery and Reinvestment Act of 2009 (ARRA) provided an unprecedented $97.4 billion in federal funds for education, of which $3 billion were allocated to expand the SIG program. This expansion enabled a low-performing school to receive as much as an additional $2 million per year for three years. School turnaround was also a focus of Race to the Top (RTT), another ARRA-supported initiative, which involved a roughly $4 billion comprehensive education reform grant competition for states. Both RTT and SIG promoted four intervention models:

1. **Turnaround.** This model requires that districts replace the principal of the school, rehire no more than 50 percent of the staff, and grant the new principal sufficient operational flexibility (for example, allow the school to make decisions typically made at the district level in areas such as hiring and firing, length of the school day, and budget) to implement a comprehensive approach to improving student outcomes.

2. **Restart.** This model requires that districts convert the school into a charter or close and reopen it under a charter school operator, charter management organization, or education management organization that has been selected through a rigorous review process.

3. **Closure.** This model requires that districts close the school and enroll its students in higher-achieving schools in the district.

4. **Transformation.** This model requires that districts replace the principal of the school and take steps to increase teacher and school leader effectiveness, institute comprehensive instructional reforms, increase learning time, create community-oriented schools, and provide operational flexibility and sustained support.

Given the size of these federal investments, the Institute of Education Sciences (IES) is conducting a large-scale evaluation of RTT and SIG to better understand the implementation and impacts of these programs. This brief was developed as part of this effort and focuses on a purposive sample of low-performing schools receiving and not receiving SIG to implement one of these four intervention models.

Data and Methods

The data examined in this brief come from interviews with state and district administrators and from surveys of school administrators conducted in spring 2012. Throughout this brief, we refer to “states reported,” “districts reported,” or “schools reported” as a concise method of conveying what the state, district, and school administrators reported. The study team developed the interview and survey instruments, conducted pilot tests, and provided training to the data collection team to ensure the uniformity and consistency of the data collected. This brief focuses on a sample of 450 low-performing schools within 60 districts across 22 states (hereafter referred to as the **SIG sample**). These schools were purposively selected to support the estimation of impacts of SIG-funded intervention models on student outcomes that will be presented in a future report for this evaluation. That is, the SIG sample was not randomly selected; therefore, findings cannot necessarily be generalized to schools implementing a SIG-funded intervention model nationwide. However, given the limited information currently available about the implementation of SIG, the findings are still relevant for the SIG program.
Low-performing schools (formally referred to as “persistently lowest-achieving schools” in SIG guidance) are generally schools that (1) are either Title I-receiving schools identified for improvement or Title I-eligible schools, and (2) fall in the lowest 5 percent in academic achievement in the state (or, for high schools, that have a graduation rate under 60 percent) for a number of years. Schools formally designated as low performing were eligible for SIG, but to actually receive grants, their districts had to competitively apply on their behalf to the state education agency. We divided our sample of 450 low-performing schools into two groups for this brief. The first includes those schools that indicated they had received SIG funding and were implementing one of the four school intervention models; we refer to this group as schools implementing a SIG-funded intervention model. The second group includes the schools that indicated that they had not received SIG funding or had received SIG funding but were not implementing one of the four intervention models. We refer to this second group as schools not implementing a SIG-funded intervention model. The states and districts included in our sample are those in which study schools are located. Each state and district includes both schools implementing a SIG-funded intervention model and schools not implementing a SIG-funded intervention model.

To better understand the composition of our study sample and how it compares to SIG schools nationwide, Table 1 shows the pre-SIG baseline characteristics (2009–2010 school year) and intervention models implemented for the two groups of SIG-sample schools (first and second columns) and all schools in the U.S. that were implementing SIG-funded intervention models in the 2011–2012 school year (third column). With a few exceptions, study schools implementing a SIG-funded intervention model did not statistically significantly differ from study schools not implementing a SIG-funded intervention model. Schools implementing a SIG-funded intervention model had a statistically significantly lower percentage of students who are Hispanic and statistically significantly higher percentages of students who are non-Hispanic black and who are eligible for free or reduced-price lunch, than did study schools not implementing a SIG-funded intervention model. Study schools implementing a SIG-funded intervention model also were unsurprisingly more likely to be implementing one of the four intervention models prescribed by SIG.

In contrast, study schools implementing a SIG-funded intervention model differed from U.S. schools implementing such models on nearly all measures in Table 1. For example, study schools implementing a SIG-funded intervention model were statistically significantly more likely to be disadvantaged, located in an urban area, and to use the turnaround model.

These patterns suggest that the two groups in our study sample are generally similar, but the sample of schools in our study implementing a SIG-funded intervention model is not representative of such schools nationwide. Therefore, it should not be assumed that our findings in this brief generalize to SIG schools nationwide.

In Appendix B, we compare the characteristics of states in which our sample of SIG schools are located and all states in which SIG schools are located (Table B.1). Similarly, we compare the characteristics of the districts in which our sample of SIG schools are located and all districts in which SIG schools are located (Table B.2). The characteristics of states included in our SIG sample were similar to states nationwide. The districts included in our sample differed from U.S. districts with SIG-funded schools in terms of students’ race and school location. The districts in our study had a statistically significantly higher percentage of students who were Hispanic and had schools that were more likely to be located in an urban area.
Table 1. School Characteristics as of 2009–2010 and Intervention Models as of 2011–2012

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Students in the Following Race/Ethnicity Categories:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>9.7*</td>
<td>9.2</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>54.8†</td>
<td>47.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>31.0†</td>
<td>38.0</td>
</tr>
<tr>
<td>Asian</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Other</td>
<td>2.6*</td>
<td>3.1</td>
</tr>
<tr>
<td>Percentage of Students Eligible for Free or Reduced-Price Lunch</td>
<td>83.6†</td>
<td>80.7</td>
</tr>
<tr>
<td>Percentage of Schools That Are Title I Eligible</td>
<td>94.3*</td>
<td>93.8</td>
</tr>
<tr>
<td>Percentage of Schools in the Following Locations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>85.9*</td>
<td>87.5</td>
</tr>
<tr>
<td>Suburban</td>
<td>7.2*</td>
<td>5.7</td>
</tr>
<tr>
<td>Town or Rural</td>
<td>6.8*</td>
<td>6.7</td>
</tr>
<tr>
<td>Percentage of Schools Implementing the Following Intervention Models:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnaround</td>
<td>46.0†</td>
<td>9.4</td>
</tr>
<tr>
<td>Restart or Closure</td>
<td>5.0†</td>
<td>2.2</td>
</tr>
<tr>
<td>Transformation</td>
<td>48.2†</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Sample Size (Number of Schools) 260 180–190 820–840


Note: Percentages of students reflect unweighted school-level averages. Study schools identified as implementing or not implementing a SIG-funded intervention model, as well as U.S. schools implementing a SIG-funded intervention model were identified using the SIG database. The SIG database was also used to identify the particular intervention model being implemented by the schools. Some of the study schools identified as not receiving SIG funds according to the SIG database reported implementing a SIG intervention model without SIG funding. The national percentages of schools implementing each of the four intervention models are based on schools' planned implementation as of 2009–2010.
Data from 2009-2010 are used whenever possible to report schools' demographic and location data because that was the school year just prior to the first year of implementation of the ARRA-funded SIG intervention models. Data from 2008–2009 are used for schools with data missing in 2009–2010, and data from 2007–2008 are used for schools with data missing in both 2009–2010 and 2008–2009. National comparison data are for Tier 1 and Tier 2 schools in 49 states and the District of Columbia. One state, Hawaii, is excluded in the national comparison data because the SIG database does not include information for Hawaii. To comply with NCES statistical reporting requirements for small cell sizes, we aggregated the percentages for town and rural school locations and for restart and closure intervention models (see endnote 4).

* Significantly different from schools in the United States implementing a SIG-funded intervention model in 2011–2012 at the .05 level, two-tailed test.
† Significantly different from study schools not implementing a SIG-funded intervention model in 2011–2012 at the .05 level, two-tailed test.

Operational Authority of Schools

School authority for decision making is an element of recent federal initiatives to support school turnaround. Two of the four SIG intervention models—transformation and turnaround—emphasize increasing low-performing schools’ authority in areas such as staffing, calendars, budgets, work conditions, compensation, and governance structure. For example, the SIG guidance on the turnaround model states that the district must “grant the [new] principal sufficient operational flexibility (including in staffing, calendars/time, and budgeting) to implement fully a comprehensive approach …” and “implement such strategies as … more flexible work conditions.”

Given this backdrop, this section examines the extent to which low-performing schools actually reported having primary responsibility for making decisions in eight areas: (1) developing school budgets; (2) professional development requirements; (3) student discipline policies; (4) staffing, hiring, and dismissal; (5) assessment policies (other than state-mandated); (6) length of school day; (7) curriculum; and (8) length of school year. We also examine whether schools’ reports of operational authority statistically significantly differ based on whether the schools are implementing a SIG-funded intervention model (which we refer to as the schools’ model status). Finally, we examine whether schools’ reports of operational authority overall, and differences in reports by model status, vary across and within districts.

On average, schools implementing a SIG-funded intervention model reported having primary decision-making responsibility in 2.5 of the 8 areas, compared with 2.3 for non-implementing schools. Approximately 85 percent of both groups of schools reported having primary decision-making responsibility in at least one area, but less than 5 percent of both groups reported having such responsibility in all eight areas examined (Figure 1).

In six of the eight areas we asked about, fewer than half of schools, regardless of school model status, reported having primary responsibility for decision making (Figure 2). A majority of study schools implementing a SIG-funded model (55 percent) and not implementing a SIG-funded model (54 percent) reported having primary decision-making authority for developing their budget, which is noted as a common area for school-based decision making in studies of turnaround (see endnote 15). A majority of schools implementing a SIG-funded model (53 percent) also reported having primary responsibility for setting professional development requirements.
Figure 1. Percentage of Schools That Reported Primary Responsibility for Decision Making for Zero to Eight Areas in Spring 2012, by SIG Status


Note: 260 schools implementing a SIG-funded intervention model in 2011–2012 and 180 schools not implementing a SIG-funded intervention model in 2011–2012 were used in the analysis for this figure. To comply with NCES statistical reporting requirements for small cell sizes, we aggregated the bins representing 6 and 7 areas (see endnote 4).

Statistically significant differences between the two groups of schools were found in two of the eight areas examined. A significantly higher proportion of schools implementing a SIG-funded model (53 versus 39 percent for schools not implementing a SIG-funded model) reported having primary responsibility for setting requirements for professional development. Schools implementing a SIG-funded model were also significantly more likely than schools not implementing one to report primary responsibility for determining the length of the school day (19 versus 12 percent).

There is variation both across and within districts in the number of areas for which schools reported having primary decision-making responsibility. For example, schools in some districts reported an average of less than one area for which they have primary decision-making responsibility, whereas schools in other districts reported an average of more than four areas for which they have such responsibility (Figure 3). As another example, all schools in one of the districts reported the same number of areas for which they have primary decision-making responsibility, whereas schools in other districts reported a wider-ranging number of areas (for example, between 0 and 7) for which they have such responsibility. In general, schools from the same district rarely all reported having primary decision-making responsibility in the same number of areas.
In sum, most schools in the sample reported not having primary operational authority in most of the areas examined (on average, schools reported having primary operational authority in two to three out of eight areas). Most schools reported having primary operational authority in at least one area, but few reported having authority in all eight areas. Schools implementing a SIG-funded model were no more likely than schools not implementing one to report having authority, except in two areas emphasized by the SIG guidance: professional development requirements and length of the school day. However, there was variation across districts in the average number of areas in which schools reported having authority, as well as variation across districts in the extent to which schools in the same district reported having similar levels of authority.
Figure 3. Average Number of Areas for Which Schools Reported Having Primary Decision-Making Responsibility in Spring 2012, by District


Note: For each district, we calculated the average number of areas in which schools in that district reported having primary decision-making responsibility and the associated standard deviation. Each line in this figure represents one district and presents its average and standard deviation. The analysis includes 260 schools implementing a SIG-funded intervention model in 2011–2012 and 180 schools not implementing a SIG-funded intervention model in 2011–2012. Ten of the 60 districts had fewer than three schools, so they were excluded from this analysis.

Supports for School Turnaround

Although the SIG intervention models encourage granting schools operational authority, they do not advocate leaving the schools entirely on their own but rather call for steps to ensure that they also receive sufficient support. For example, a district with a school that is implementing the transformation model must “ensure that the school receives ongoing, intensive technical assistance and related support from the LEA [local education agency, or district], the SEA [state education agency], or a designated external lead partner organization.”

We now examine the types of training and technical assistance that states reported providing to support their low-performing schools. In addition, we examine the training and technical assistance that districts reported receiving from the state for school improvement efforts. Last, we examine the types of supports that low-performing schools reported receiving to implement reforms and whether those supports differ by model status and across districts. We do not differentiate the sources of support that low-performing schools reported receiving, since schools may not know exactly where they received their supports from.
Supports states reported providing to districts and schools. Most states in the SIG sample reported providing training or technical assistance to support low-performing schools on each of the topics examined (Figure 4). The three most commonly-reported supports were (1) developing and implementing a school improvement plan (20 states); (2) identifying and implementing effective improvement strategies, such as curricula, instructional strategies, or school intervention models (19 states); and (3) improving the quality of professional development (19 states).

Figure 4. Number of States That Reported Providing Support to Low-Performing Schools, Spring 2012


Note: 21 states were used in the analysis for this figure.
ELLP = English language learner; PD = professional development.
SIG-sample states can provide these supports for educational improvement directly (relying on their own professional development staff and resources), or they can draw on the expertise of external consultants. Just six states in the SIG sample reported that their statewide system of support for low-performing schools relied exclusively or to a great extent on external consultants. This suggests that most states were drawing on their own capacity and expertise to some degree when providing the supports.

**Supports districts reported receiving from states.** Figure 5 shows that the three most common supports districts reported receiving from states focused on (1) developing and implementing a school improvement plan (51 of the 60 districts interviewed); (2) identifying effective strategies to improve student achievement, such as curricula, instructional strategies, or school intervention models (41 of the 60 districts interviewed); and (3) aligning curricula to standards (38 of the 60 districts interviewed). Fewer than half of the districts interviewed reported receiving state supports on analyzing and revising budgets to use resources more effectively or on developing strategies to recruit and retain more effective teachers.

**Figure 5. Number of Districts That Reported Receiving Training and Technical Assistance for School Improvement Efforts from States, Spring 2012**


Note: 60 districts were used in the analysis for this figure.

ELL = English language learner; PD = professional development.
Supports districts reported providing to schools. One way a district can support school turnaround is to provide experts to manage and guide the improvement process. We examine the infrastructure that districts reported having in place to provide this expertise, and whether this has changed since the districts’ schools received SIG. In particular, we examine the number of districts that reported having specific organizational or administrative structures, such as designated turnaround staff in place in school year 2011–2012 (roughly one to two years after these districts received ARRA-funded SIG for some of their schools) compared with 2009–2010 (before SIG).

Districts reported providing more expert support for turnaround in spring 2012 compared with what they recalled providing in 2009–2010. For example, as of spring 2012, 46 districts reported having external consultants designated to support school turnaround (a statistically significant increase relative to the 33 districts in 2009–2010), and 18 districts reported having an office designated to support school turnaround (a statistically significant increase relative to the 8 districts in 2009–2010; Figure 6).

Figure 6. Number of Districts That Reported Administrative Supports for Turnaround

![Figure 6](http://www.mathematica-mpr.com/publications/PDFs/Spring_2012_District_Interview_Protocol.pdf)


Note: 50 to 60 districts were used in the analysis for this figure. A range is provided for the sample size because nonresponse varied across items.

* Significantly different from 2009–2010 at the .05 level, two-tailed test.
In addition to providing turnaround expertise and management, districts can examine data to determine whether students in low-performing schools have made progress. A majority of districts reported that district staff met at least monthly to discuss data on the progress of all students in schools implementing a SIG-funded model, with 24 of the 60 districts interviewed reporting monthly meetings and 18 of the 60 districts interviewed reporting weekly meetings. About half of the districts (29 of the 60 districts interviewed) reported that their staff met to discuss data on the progress of students in schools implementing a SIG-funded model with the same frequency as they met to discuss such data for other schools, and about half (27 of the 60 districts interviewed) reported meeting to discuss data on student progress in schools implementing a SIG-funded model more frequently than for other schools.

Supports schools reported receiving. Compared to schools not implementing a SIG-funded model, schools implementing a SIG-funded model were statistically significantly more likely to report receiving three types of supports to help school administrators and/or teachers access and use data to improve and/or differentiate instruction. First, 71 percent of schools implementing a SIG-funded model reported receiving funds to support school investments related to data use in 2011–2012, compared with 40 percent of low-performing schools not implementing one (Table 2). Schools that reported receiving such funds specified that they used the funds to purchase new software or hardware; to provide training to staff on school investments related to data use; or to support staff responsible for managing, using, and interpreting data. Second, 58 percent of schools implementing a SIG-funded model reported receiving materials on how to access and use data to differentiate or improve instruction compared with 43 percent of schools not implementing one. Third, 57 percent of the schools implementing a SIG-funded model reported receiving hardware or software from the state or district to facilitate data use compared with 37 percent of schools not implementing one.

Although the vast majority of both types of schools reported having a designated staff person to support the use of data by teachers for the purpose of improving instruction, schools implementing a SIG-funded model were statistically significantly more likely than schools not implementing a SIG-funded model to report this in 2011–2012 (93 versus 86 percent; Table 2). Nearly 90 percent of both groups of schools also reported receiving professional development on data use. However, schools implementing a SIG-funded model reported that their teachers received about 25 hours of such professional development or training on data use in the 2011–2012 school year, whereas schools not implementing a SIG-funded model reported that their teachers received about 16 hours, a difference that is statistically significant.

More than 50 percent of low-performing schools, regardless of model status, reported that their school leaders received professional development or support on a number of topics in addition to data use (Figure 7). These include turnaround strategies, working with parents, addressing the needs of ELLs, developing staff for leadership positions, integrating cultural sensitivity into the school environment, budgeting to ensure effective use of resources, and aligning professional development with teacher evaluation results.

We observed statistically significant differences between the groups in two of these areas. Relative to schools not implementing a SIG-funded model, a significantly larger percentage of schools implementing one reported that their leaders received professional development or support related to (1) creating strategies for turning around a low-performing school (82 versus 65 percent), and (2) identifying and supporting effective instructional staff for leadership positions (61 versus 51 percent).
Table 2. Supports for Data Use in the 2011–2012 School Year

<table>
<thead>
<tr>
<th>Support to Help School Administrators and/or Teachers Access and Use Data to Improve and/or Differentiate Instruction:</th>
<th>Implementing a SIG-Funded Intervention Model in 2011–2012</th>
<th>Not Implementing a SIG-Funded Intervention Model in 2011–2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds to support school investments related to data use</td>
<td>70.7*</td>
<td>39.5</td>
</tr>
<tr>
<td>Materials on how to access and use data to differentiate or improve instruction</td>
<td>57.9*</td>
<td>42.7</td>
</tr>
<tr>
<td>Hardware or software to facilitate data use</td>
<td>57.4*</td>
<td>37.0</td>
</tr>
<tr>
<td>Other type of support</td>
<td>15.5</td>
<td>10.3</td>
</tr>
<tr>
<td>Designated Staff Person Who Supports the Use of Data by Teachers for the Purpose of Improving Instruction</td>
<td>93.1*</td>
<td>86.2</td>
</tr>
<tr>
<td>Scheduled Time for Teachers to Examine Data, Either on Their Own or in Collaboration with Other Teachers or School Administrators</td>
<td>96.9</td>
<td>95.2</td>
</tr>
<tr>
<td>School Leaders Coached Teachers on the Use of Data to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve instruction</td>
<td>98.1</td>
<td>96.2</td>
</tr>
<tr>
<td>Improve instruction of ELLs</td>
<td>77.0</td>
<td>72.6</td>
</tr>
<tr>
<td>Professional Development, Training, or Technical Assistance to Help School Administrators and/or Teachers Access Data, Navigate Data Systems, or Interpret and Use Data to Improve and/or Differentiate Instruction</td>
<td>89.7</td>
<td>87.2</td>
</tr>
<tr>
<td>Average Reported Number of Hours this Professional Development, Training, or Technical Assistance Was Provided to:*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School administrators</td>
<td>18.4 hours</td>
<td>15.4 hours</td>
</tr>
<tr>
<td>Teachers</td>
<td>25.1 hours*</td>
<td>16.1 hours</td>
</tr>
<tr>
<td>Supports for Data Use Related to ELLs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports to use data to track the performance of ELLs</td>
<td>59.6</td>
<td>56.4</td>
</tr>
<tr>
<td>Supports to use data to improve or differentiate instruction for ELLs</td>
<td>58.2</td>
<td>56.1</td>
</tr>
<tr>
<td>Other supports to use data about ELLs</td>
<td>35.1</td>
<td>29.7</td>
</tr>
</tbody>
</table>

Sample Size (Number of Schools) | 170–260 | 140–190

Source: Surveys of school administrators conducted by study team in spring 2012, items DA3, DA4, DA6, DA8, DA9, and DA10 (http://www.mathematica-mpr.com/publications/PDFs/Spring_2012_School_Administrator_Survey.pdf).

Note: Sample sizes refer to the number of schools used in the analysis. A range is provided for the sample sizes because nonresponse varied across items.

* Schools that reported they did not receive professional development, training, or technical assistance to help school administrators and/or teachers access data, navigate data systems, or interpret and use data to improve and/or differentiate instruction are included in the analysis of this question as 0 responses.

* Significantly different from schools not implementing a SIG-funded model in 2011–2012 at the .05 level, two-tailed test.

ELLs = English language learners.
Figure 7. Percentage of Schools That Reported Receiving Professional Development for School Leaders from States or Districts in the 2011–2012 School Year


Note: 180 to 260 schools implementing a SIG-funded model in 2011–2012 and 150 to 180 schools not implementing a SIG-funded model in 2011–2012 were used in the analysis for this figure. A range is provided for the sample size because nonresponse varied across items.

* Significantly different from schools not implementing a SIG-funded model in 2011–2012 at the .05 level, two-tailed test.

ELL = English language learner; PD = professional development.

The topics for training or technical assistance that states and districts frequently reported providing were also the ones that low-performing schools frequently reported receiving. Most schools, regardless of model status, reported receiving training or assistance related to developing and implementing school improvement plans, identifying effective strategies to improve student achievement, such as curricula, instructional strategies, or school intervention models, and identifying effective strategies to increase college readiness (Figure 8). None of the differences in supports received by the two groups of schools were statistically significant.
For the majority of supports we examined, schools implementing and not implementing a SIG-funded model in our sample generally reported receiving similar levels of that support. However, there does appear to be variation across districts, with larger differences in the reported number of supports received between these two groups of schools in some districts than in others. For the three types of supports examined above in Table 2, Figure 7, and Figure 8 (data use, professional development, and training or technical assistance), we examined variation in supports within and between districts. In the median district, schools implementing a SIG-funded intervention model on average reported receiving support in slightly more areas than schools not implementing one, with differences of 0.4 areas for data use (out of 12 areas), 1 area for professional development (out of 8 areas), and 0.3 areas for training or technical assistance (out of 5 areas) (Figure 9). However, the difference between these two groups of schools varied between districts, with the difference between districts at the 25th and 75th percentiles ranging from 1.5 to 3.1 areas across the three types of supports. In some districts, schools implementing a
SIG-funded intervention model actually reported receiving support in fewer areas, on average, than schools not implementing one.

**Figure 9. Difference in District Supports Reported by Schools Implementing a SIG-Funded Intervention Model and Schools Not Implementing One in Spring 2012, Distribution Across Districts**


Note: To create this figure, for each district and type of support, we first calculated the mean number of areas in which schools implementing a SIG-funded intervention model reported receiving support, and the mean number of areas in which schools not implementing a SIG-funded intervention model reported receiving support (Table 2, Figure 7, and Figure 8 list the specific areas examined for the three types of support). For each district, we then took the difference of those two means. We then calculated the 25th percentile, median (50th percentile), and 75th percentile of the differences across districts. For example, in the median district, schools implementing a SIG-funded model on average reported receiving support in 0.4 more areas than schools not implementing a SIG-funded model out of the 12 areas related to data use. As another example, in districts at the 75th percentile, schools implementing a SIG-funded model on average reported receiving support in 2.3 more areas than schools not implementing a SIG-funded model out of the 12 areas related to data use. 280 schools implementing a SIG-funded model in 2011–2012 and 180 schools not implementing a SIG-funded model in 2011–2012 were used in the analysis for this figure. 50 districts were used in the analysis for this figure. Due to nonresponse, there are some districts with no responses from schools implementing a SIG-funded intervention model or with responses only from schools implementing a SIG-funded intervention model. Those districts are excluded from this figure.

In sum, states reported providing supports for many of the areas emphasized in the SIG guidance (for example, professional development, data use, school improvement planning and implementation, research-based improvement strategies), and districts reported providing a greater level of support related to school turnaround in 2011–2012 than prior to SIG. Many of
these supports that states and districts reported providing were also reported as being received by most schools. With a few exceptions, schools did not statistically significantly differ by model status in the types of supports they reported receiving.\textsuperscript{37} In one such exception, leaders in schools implementing a SIG-funded intervention model were reportedly provided with more training on turnaround strategies than were leaders in schools not implementing one. There was, however, variation across districts in the number of areas in which schools implementing a SIG-funded intervention model reported receiving support relative to non-implementing schools. In some districts, schools implementing a SIG-funded intervention model reported more supports on average than schools not implementing such a model, while the reverse was true in other districts. There were also some districts in which the average number of supports the two groups of schools reported receiving was similar.

**Monitoring of and Accountability Provisions for Low-Performing Schools**

Once a low-performing school is given sufficient operational authority and appropriately supported, SIG guidance calls for state and district monitoring to ensure accountability.\textsuperscript{38} We now draw on interviews with state administrators to examine how states monitor their low-performing schools and the accountability measures they have in place for these schools.

**Monitoring low-performing schools.** All SIG-sample states reported that the SEA was responsible for monitoring the state’s low-performing schools, as required by SIG. Thirteen states reported that district central office staff were also responsible for monitoring low-performing schools, whereas fewer states reported that external consultants (8 states) and regional staff (4 states) also had such responsibility (Figure 10).
Figure 10. Number of States Reporting That Specific Groups Are Responsible for Monitoring Low-Performing Schools, Spring 2012


Note: 20 to 21 states were used in the analysis for this figure. A range is provided for the sample size because nonresponse varied across items.

All 21 states reported analyzing student data as a strategy for monitoring low-performing schools, and 20 states reported conducting site visits for this purpose (Figure 11). Most states also reported holding discussions with parents or community representatives (16 states) and using surveys of school staff (12 states) for monitoring purposes.

All 21 states reported providing the results of their monitoring to districts and schools. Twelve states also reported providing the results to other groups, which included SEA staff (4 states), the state board of education (3 states), and other state government bodies outside the SEA (3 states).
Figure 11. Number of States That Reported Specific Strategies for Monitoring Low-Performing Schools, Spring 2012


Note: 21 states were used in the analysis for this figure.

The frequency with which states shared the results from their monitoring with the aforementioned groups varied, with 8 states reporting quarterly, 6 reporting annually, and 7 reporting some other frequency. No states reported providing results more often than quarterly.

State monitoring of low-performing schools is an important accountability strategy. However, it can also support other objectives, such as providing tailored support to districts or schools with specific needs. In our spring 2012 interviews, we asked state administrators to identify any other purposes of their monitoring beyond ensuring compliance with policies and regulations. Almost all states (20 states) reported that determining progress on school performance was a primary focus of their monitoring activities, whereas two-thirds reported measuring the fidelity of program or reform implementation (14 states) and identifying additional supports needed at the school (14 states) as primary objectives (Figure 12).


**Figure 12. Number of States That Reported Specific Areas as a Primary Focus of their Monitoring, Spring 2012**


Note: 21 states were used in the analysis for this figure.

**Accountability provisions for low-performing schools.** To more closely monitor and support schools that have not thrived under district oversight, some states have the authority to take over responsibility for low-performing schools from the districts. Our interviews with state administrators asked about two accountability provisions that states may have in place for low-performing schools: (1) state authority to directly take over failing schools (in which a state can actually make decisions for specific schools) and (2) the ability to place schools in a special district focused specifically on improving low-performing schools (in which a state can set up a district-like infrastructure for the purpose of running these schools).

Eleven states reported that they had the authority to take over failing schools in the 2011–2012 school year. As of 2011–2012, 5 states reported having the authority to place low-performing schools in a special district focused on school improvement.

In sum, all states in the sample reported various monitoring activities to determine the progress of SIG schools toward meeting improvement goals. For some states, monitoring activities also were used to measure fidelity of implementation or to identify school needs for additional support. The data collected for the study do not allow us to determine whether state monitoring became more intensive under SIG.
Discussion

This brief examined three interrelated levers for school improvement—operational authority, support, and monitoring of turnaround efforts—identified in the literature as being potentially associated with school turnaround outcomes. We found that strategies related to these three levers were generally present to varying degrees in the SIG-sample states, districts, and schools in 2011–2012. Also, a few strategies were more prevalent for low-performing schools implementing a SIG-funded intervention model than schools not implementing one. However, statistically significant differences were not observed by model status for most of the areas examined. We found variation within and across districts in the extent to which schools had operational authority and the extent to which districts provided different levels of supports to schools implementing a SIG-funded intervention model and schools not implementing one.

What do these findings suggest about how states, districts, and schools are incorporating the three levers examined (operational authority, supports, and monitoring) into their turnaround efforts? The states, districts, and schools in our sample reported incorporating all three levers to some degree. The highest proportions of states reported that they provided supports related to school improvement planning and research-based turnaround strategies and that they engaged in monitoring activities to help ensure progress toward school improvement goals. Similarly, the highest proportions of districts and schools reported that they received supports related to school improvement planning and research-based turnaround strategies. Across all of our study schools, the extent of operational authority for schools appears to remain limited, though it is greater in some districts than in others. It may be that support and monitoring, levers that historically have been part of state repertoires, are in more advanced stages of implementation. Or it may be that some states and districts are reluctant to increasingly entrust significant decision-making authority to schools with a long history of poor performance. It is also possible that states and districts have provided operational authority to both groups of low-performing schools, but only in selected areas.

Why did we observe few significant differences in terms of operational authority and support between schools implementing a SIG-funded model and schools not implementing one? One possibility is that schools implementing SIG-funded models and those not implementing them are drawing on a similar set of improvement strategies. The SIG intervention models have gained a lot of visibility, so it is possible that schools that have not received SIG funding are implementing some of strategies required or encouraged by SIG. Another possibility is that through alternative state and district programs, schools not implementing SIG-funded models received supports similar to those for schools implementing SIG-funded models. Yet another possibility is that SIG schools are generally implementing strategies in these areas that they would have implemented even without SIG. Finally, there might be differences in operational authority and support between these two groups of schools in some districts, but not others. Our findings showing that districts varied in the extent to which schools had operational authority and that districts varied in the extent to which they provided different levels of supports to these two groups of schools are consistent with this hypothesis.

Why were certain strategies or supports, and not others, more prevalent among schools implementing a SIG-funded intervention model than among schools not implementing a SIG-funded model? One possibility is that the infusion of SIG resources has made some strategies more feasible. For example, schools implementing SIG-funded models were more likely to report having primary responsibility to determine the length of the school
day and had significantly longer school days than schools not implementing a SIG-funded model. One way in which schools implementing a SIG-funded model might have extended their day is with an after-school program, a resource-intensive option that (1) generally does not require district approval, (2) could be feasible with SIG funding, and (3) could easily be discontinued if funds are not available after SIG ends.

Another area in which schools implementing a SIG-funded model were more likely than schools not implementing a SIG-funded model to report receiving supports was data use. One possible explanation for this finding is that SIG guidance calls for state and district monitoring of low-performing schools that are implementing SIG-funded models. Such monitoring may have made it necessary for states to better support the collection and use of data by this group of schools.

Although we cannot definitively reject or accept these potential explanations with the data we currently have, we offer them as starting points for future investigations on the topic of SIG implementation of school turnaround strategies. Because the process of turning around low-performing schools can be complex and lengthy, we conducted a second round of interviews and surveys with states, districts, and schools in spring 2013. Future briefs and reports will present additional results from the study’s interviews and surveys, and reflect one additional year of SIG implementation.
ENDNOTES

1 Low-performing schools (formally referred to as “persistently lowest-achieving schools” in RTT and SIG guidance) are schools identified for improvement that fall in the lowest 5 percent of academic achievement in the state (or, for high schools, have a graduation rate less than 60 percent), for a number of years. The definition, as presented in the SIG final requirements, also provides special provisions for schools that do not receive Title I and for states with few eligible schools.

2 The sample for this study was purposefully selected to allow for the use of a regression discontinuity design to address the question of the impact of SIG funding on low performing schools. For more information on the study design, see http://ies.ed.gov/ncee/projects/evaluation/other_racetotop.asp.

3 The term operational authority used in this brief includes authority in such areas as staffing, calendars, budgets, work conditions, compensation, and governance structure.

4 The National Center for Education Statistics Restricted-Use Data Procedures Manual notes that “Licensees are required to round all unweighted sample size numbers to the nearest ten (nearest 50 for ECLS-B) in all information products…” and that “Licensees shall ensure that all printouts, tabulations, and reports are edited for any possible disclosures of subject data. In planning and producing analyses and tabulations, the general rule is not to publish a cell in which there are fewer than three respondents or where the cell information could be obtained by subtraction.” In keeping with these requirements, district and school sample sizes reported in this brief are rounded to the nearest 10 to protect respondent confidentiality. Actual sample sizes are shown for state data.

5 We tested the statistical significance of some of the comparisons presented in this brief. These comparisons are noted throughout the brief, with statistically significant results indicated. We did not test the statistical significance of all other comparisons, which are provided for descriptive purposes.


22 SIG was authorized under Title I Section 1003(g) of the Elementary and Secondary Education Act. The program was supplemented with $3 billion under ARRA, in addition to the $546 million already appropriated for SIG in fiscal year 2009.

23 Appendix A provides a complete description of these four models.


25 In spring 2012, we conducted (1) structured telephone interviews with representatives from state education agencies in 49 states and the District of Columbia (including the SIG-sample states), (2) structured telephone interviews with administrators in the 60 districts where SIG-sample schools were located, and (3) web surveys of administrators in our SIG-sample schools. For the state and district interviews, we requested to speak with administrators who were most knowledgeable about specific RTT and SIG topics. The school survey was sent to the school principals; surveys were not sent to principals of closed schools. Response rates for these data collection efforts were 98 percent, 100 percent, and 87 percent. (One of the SIG-sample states, Texas, did not provide data for the state-level interviews. However, all 22 states in the SIG sample have district- and school-level data.) The state interviews collected information about educational policies, practices, and supports related to the primary RTT reform areas. The district interviews documented school turnaround policies and both state- and district-level supports for those policies. The school surveys collected information about the turnaround models and specific turnaround activities being implemented in the schools, as well as supports received.

26 When we refer to states, districts, and schools in this brief, we are referring to those included in the SIG sample described here.

27 The number of years over which progress was to be assessed was left to the discretion of SEAs but had to be at least two years.

28 The sample of schools implementing a SIG-funded intervention model in 2011–2012 includes 260 schools. The sample of schools not implementing a SIG-funded intervention model in 2011–2012 includes 190 schools. Some schools in the latter group implemented an intervention model without the support of a SIG grant.
29 We placed schools that received SIG funding but were not implementing a SIG intervention model into this group because they would not be expected to have adopted the practices promoted by the four SIG intervention models.

30 The results in Tables B.1 and B.2 have changed slightly since this brief was initially released on January 8, 2014, due to a small adjustment to the weighting method. The weighting method used in the January 8 version of the brief constructed percentages at the school level and then averaged those percentages within state (for Table B.1) or district (for Table B.2). The revised version of the brief sums school counts to the state level (for Table B.1) or the district level (for Table B.2) and then creates state- or district-level percentages by dividing by the total state or district enrollment.


32 One way in which schools may use this authority is to invest more time in professional development. Schools implementing a SIG-funded intervention model reported statistically significantly more hours of professional development on data use for their teachers (25 hours) than schools not implementing a SIG-funded intervention model (16 hours). Schools implementing a SIG-funded intervention model did not report having statistically significantly more professional development in this or other areas for their principals, however.

33 In the 2011–2012 school year, schools implementing a SIG-funded intervention model, on average, reported having a statistically significantly longer school day (7.1 hours) than schools not implementing a SIG-funded intervention model (6.9 hours).

34 See endnote 31.

35 Note that the focus for this brief is on schools that received SIG from the ARRA-supplemented fiscal year 2009 appropriation, as described in the introduction. The SIG program existed before and after the 2009 SIG expansion, but this brief does not focus on schools that received SIG in other years.

36 These analyses look at districts that include both schools that are and schools that are not implementing a SIG-funded intervention model. (This set of questions does not differentiate between these two groups because the turnaround supports may benefit schools that are not implementing a SIG-funded intervention model.)

37 Because RTT promoted and provided resources to support turning around low-performing schools, including implementation of one of the four SIG intervention models, one might expect to see variation between RTT and non-RTT states in the number and types of supports they provided to schools implementing a SIG-funded intervention model and schools not implementing such a model. Appendix B presents a supplementary analysis of this topic.

38 See endnote 31.
APPENDIX A


I. Turnaround Model

A turnaround model is one in which a local education agency (LEA) must do the following:

1) Replace the principal and grant the principal sufficient operational flexibility (including in staffing, calendars/time, and budgeting) to implement fully a comprehensive approach in order to substantially improve student achievement outcomes and increase high school graduation rates

2) Use locally adopted competencies to measure the effectiveness of staff who can work within the turnaround environment to meet the needs of students:
   A. Screen all existing staff and rehire no more than 50 percent
   B. Select new staff:
      (1) Implement such strategies as financial incentives, increased opportunities for promotion and career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in the turnaround school.
      (2) Provide staff with ongoing, high-quality, job-embedded professional development that is aligned with the school’s comprehensive instructional program and designed with school staff to ensure that they are equipped to facilitate effective teaching and learning and have the capacity to successfully implement school reform strategies.
      (3) Adopt a new governance structure, which may include, but is not limited to, requiring the school to report to a new “turnaround office” in the LEA or state education agency (SEA), hire a “turnaround leader” who reports directly to the superintendent or chief academic officer, or enter into a multiyear contract with the LEA or SEA to obtain added flexibility in exchange for greater accountability.
      (4) Use data to identify and implement an instructional program that is research-based and vertically aligned from one grade to the next as well as aligned with state academic standards.
      (5) Promote the continuous use of student data (such as from formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students.
      (6) Establish schedules and implement strategies that provide increased learning time.
      (7) Provide appropriate social-emotional and community-oriented services and supports for students.

II. Restart Model

A restart model is one in which an LEA converts a school or closes and reopens a school under a charter school operator, a charter management organization (CMO), or an education management organization (EMO) that has been selected through a rigorous review process. A restart model must enroll, within the grades it serves, any former student who wishes to attend the school (see C-6) (U.S. Department of Education, 2012, p. 31).

III. Closure Model

School closure occurs when an LEA closes a school and enrolls the students who attended that school in other schools in the LEA that are higher achieving. These other schools should be within reasonable proximity to the closed school and may include, but are not limited to, charter schools or new schools for which achievement data are not yet available (U.S. Department of Education, 2012, p. 34).

IV. Transformation Model

An LEA implementing a transformation model must:

1) Replace the principal who led the school prior to commencement of the transformation model.

2) Use rigorous, transparent, and equitable evaluation systems for teachers and principals that —
   A. Take into account data on student growth as a significant factor as well as other factors, such as multiple observation-based assessments of performance and ongoing collections of professional practice reflective of student achievement and increased high school graduation rates.
   B. Are designed and developed with teacher and principal involvement.

3) Identify and reward school leaders, teachers, and other staff who, in implementing this model, have increased student achievement and high school graduation rates and identify and remove those who, after ample opportunities have been provided for them to improve their professional practice, have not done so.

4) Provide staff with ongoing, high-quality, job-embedded professional development that is aligned with the school’s comprehensive instructional program and designed with school staff to ensure they are equipped to facilitate effective teaching and learning and have the capacity to successfully implement school reform strategies.

5) Implement such strategies as financial incentives, increased opportunities for promotion and career growth, and more flexible work conditions that are designed to recruit, place, and retain staff with the skills necessary to meet the needs of the students in a transformation model.

### APPENDIX B

#### Table B.1. Characteristics of the State Sample as of 2009–2010

<table>
<thead>
<tr>
<th></th>
<th>Study States</th>
<th>All States&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of Students in the Following Race/Ethnicity Categories:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>56.3</td>
<td>61.8</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>19.8</td>
<td>15.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.9</td>
<td>13.7</td>
</tr>
<tr>
<td>Asian</td>
<td>3.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Other</td>
<td>3.3</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Percentage of Students Eligible for Free or Reduced-Price Lunch</strong></td>
<td>47.8</td>
<td>45.5</td>
</tr>
<tr>
<td><strong>Percentage of Schools That Are Title I Eligible</strong></td>
<td>67.7</td>
<td>67.8</td>
</tr>
<tr>
<td><strong>Percentage of Schools in the Following Locations:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>29.7</td>
<td>23.3</td>
</tr>
<tr>
<td>Suburban</td>
<td>26.1</td>
<td>22.5</td>
</tr>
<tr>
<td>Town</td>
<td>14.3</td>
<td>16.0</td>
</tr>
<tr>
<td>Rural</td>
<td>29.9</td>
<td>38.2</td>
</tr>
<tr>
<td><strong>Sample Size (Number of States)</strong></td>
<td>21</td>
<td>51</td>
</tr>
</tbody>
</table>


Note: Data from 2008–2009 are used for states with data missing in 2009–2010. Data from 2007–2008 are used for states with data missing in both 2009–2010 and 2008–2009. Data from 2009–2010 are used whenever possible because that was the school year just prior to the first year of implementation of the ARRA-funded SIG intervention models. Percentages of students and schools are unweighted state-level averages.

<sup>a</sup> Includes 50 states and the District of Columbia.
Table B.2. Characteristics of the District Sample as of 2009–2010

<table>
<thead>
<tr>
<th>Study Districts</th>
<th>Districts in the United States With at Least One School Implementing a SIG-Funded Intervention Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Students in the Following Race/Ethnicity Categories:</td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>19.8*</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>37.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>32.5*</td>
</tr>
<tr>
<td>Asian</td>
<td>3.3</td>
</tr>
<tr>
<td>Other</td>
<td>6.6</td>
</tr>
<tr>
<td>Percentage of Students Eligible for Free or Reduced-Price Lunch</td>
<td>72.0</td>
</tr>
<tr>
<td>Percentage of Schools That Are Title I Eligible</td>
<td>81.4</td>
</tr>
<tr>
<td>Percentage of Districts in the Following Locations:</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>67.7*</td>
</tr>
<tr>
<td>Suburban</td>
<td>17.6</td>
</tr>
<tr>
<td>Town</td>
<td>5.8</td>
</tr>
<tr>
<td>Rural</td>
<td>8.9*</td>
</tr>
<tr>
<td>Sample Size (Number of Districts)</td>
<td>60</td>
</tr>
</tbody>
</table>


Note: Data from 2008–2009 are used for districts with data missing in 2009–2010. Data from 2007–2008 are used for districts with data missing in both 2009–2010 and 2008–2009. Data from 2009-2010 are used whenever possible because that was the school year just prior to the first year of implementation of the ARRA-funded SIG intervention models. Percentages of students and schools are unweighted district-level averages. Comparison data are for districts in 49 states and the District of Columbia because the SIG database does not include information for Hawaii. The percentages of districts with at least one school implementing a SIG-funded intervention model are based on schools’ planned implementation as of 2009–2010 and only include Tier 1 and Tier 2 schools. One study district is composed of two districts located within a larger school system. Data for these two districts have been combined in the above analyses.

* Significantly different from districts in the U.S. with at least one school implementing a SIG-funded intervention model at the .05 level, two-tailed test.
Analysis of Supports Schools Reported Receiving, by Race to the Top Status

We conducted a supplementary analysis to examine whether differences in the number and types of supports between schools implementing a SIG-funded intervention model and schools not implementing one varied by whether the schools were in Race to the Top (RTT) states or non-RTT states.

RTT states received substantial resources to support education reforms in six areas (“Nine States and the District of Columbia Win Second Round Race to the Top Grants” [2010]; retrieved from http://www.ed.gov/news/press-releases/nine-states-and-district-columbia-win-second-round-race-top-grants). One of these areas was turning around low-performing schools, and RTT promoted the same four intervention models as SIG did in this area (“Race to the Top Application for Phase 2 Funding.” [2010]; retrieved from http://www2.ed.gov/programs/racetothetop/phase2-application.doc). Thus, differences in the level of support may vary between RTT and non-RTT states if RTT states used the grant to provide additional supports to their low-performing schools that were implementing one of the four intervention models. In this case, the differences may be larger in RTT states relative to non-RTT states. The differences in the level of support may also vary if RTT states instead used the grant to provide additional supports to their schools that did not already have SIG funding but were low-performing nonetheless. In this case, the differences may be smaller in RTT states relative to non-RTT states.

Table B.3, Figure B.1, and Figure B.2 present information analogous to Table 2, Figure 7, and Figure 8. The only difference is that in Table B.3, Figure B.1, and Figure B.2, information on the differences in supports received between schools implementing a SIG-funded intervention model and schools not implementing one are presented separately for schools in RTT states and schools in non-RTT states.

In general, when differences in the level of supports are statistically significant for schools in RTT states, they are also statistically significant for schools in non-RTT states. Likewise, when differences in the level of supports are not statistically significant for schools in RTT states, they are also generally not statistically significant for schools in non-RTT states. There were a few exceptions, for example in the average reported number of hours of professional development provided to teachers that focus on accessing data, navigating data systems, or interpreting and using data to improve and/or differentiate instruction (Table B.3), and in the areas of professional development for school leaders that focus on working with parents, developing staff for leadership positions, and integrating cultural sensitivity (Figure B.1). In most of these cases, schools implementing a SIG-funded intervention model reported receiving statistically significantly more support than schools not implementing such a model in non-RTT states but not in RTT states.

These findings cannot prove that RTT caused any observed differences in the level of supports received by schools implementing a SIG-funded intervention model and schools not implementing one because schools in RTT states and non-RTT states may differ in other ways besides RTT. The findings simply characterize the reported level of support received by schools implementing a SIG-funded intervention model and schools not implementing one, separately for schools in RTT states and for schools in non-RTT states.
Table B.3. Supports for Data Use in the 2011–2012 School Year, by RTT Status

<table>
<thead>
<tr>
<th>Supports for Data Use</th>
<th>In RTT States</th>
<th>In Non-RTT States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support to Help School Administrators and/or Teachers Access and Use Data to Improve and/or Differentiate Instruction:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funds to support school investments related to data use</td>
<td>70.8*</td>
<td>33.7</td>
</tr>
<tr>
<td>Materials on how to access and use data to differentiate or improve instruction</td>
<td>59.3*</td>
<td>44.6</td>
</tr>
<tr>
<td>Hardware or software to facilitate data use</td>
<td>56.7*</td>
<td>31.3</td>
</tr>
<tr>
<td>Other type of support</td>
<td>14.9</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Designated Staff Person Who Supports the Use of Data by Teachers for the Purpose of Improving Instruction</strong></td>
<td>92.0</td>
<td>84.2</td>
</tr>
<tr>
<td><strong>Scheduled Time for Teachers to Examine Data, Either on Their Own or in Collaboration with Other Teachers or School Administrators</strong></td>
<td>95.7</td>
<td>93.1</td>
</tr>
<tr>
<td><strong>School Leaders Coached Teachers on the Use of Data to:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve instruction</td>
<td>98.6</td>
<td>96.0</td>
</tr>
<tr>
<td>Improve instruction of ELLs</td>
<td>68.8</td>
<td>70.8</td>
</tr>
<tr>
<td><strong>Professional Development, Training, or Technical Assistance to Help School Administrators and/or Teachers Access Data, Navigate Data Systems, or Interpret and Use Data to Improve and/or Differentiate Instruction</strong></td>
<td>90.0</td>
<td>90.1</td>
</tr>
<tr>
<td><strong>Average Reported Number of Hours this Professional Development, Training, or Technical Assistance Was Provided to:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School administrators</td>
<td>18.4 hours</td>
<td>15.7 hours</td>
</tr>
<tr>
<td>Teachers</td>
<td>22.8 hours</td>
<td>17.6 hours</td>
</tr>
<tr>
<td><strong>Supports for Data Use Related to ELLs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports to use data to track the performance of ELLs</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Supports to use data to improve or differentiate instruction for ELLs</td>
<td>50.0</td>
<td>46.9</td>
</tr>
<tr>
<td>Other supports to use data about ELLs</td>
<td>28.8</td>
<td>26.6</td>
</tr>
<tr>
<td><strong>Sample Size (Number of Schools)</strong></td>
<td>80–140</td>
<td>60–100</td>
</tr>
</tbody>
</table>
Table B.3 (continued)
Note: Sample sizes refer to the number of schools used in the analysis. A range is provided for the sample sizes because nonresponse varied across items.
* Schools that reported they did not receive professional development, training, or technical assistance to help school administrators and/or teachers access data, navigate data systems, or interpret and use data to improve and/or differentiate instruction are included in the analysis of this question as 0 responses.
* Significantly different from schools not implementing a SIG-funded intervention model in 2011-2012 at the .05 level, two-tailed test.

ELLs = English language learners.

Figure B.1. Percentage of Schools That Reported Receiving Professional Development for School Leaders from States or Districts in the 2011–2012 School Year, by RTT Status

Note: 180 to 280 schools implementing a SIG-funded model in 2011–12 and 150 to 180 schools not implementing a SIG-funded model in 2011–2012 were used in the analysis for this figure. A range is provided for the sample size because nonresponse varied across items.
* Significantly different from schools not implementing a SIG-funded intervention model in 2011-2012 at the .05 level, two-tailed test.

ELL = English language learner; PD = professional development.
Figure B.2. Percentage of Schools That Reported Receiving Training or Technical Assistance from the State or District During the 2011–2012 School Year, by RTT Status


Note: 250 to 260 schools implementing a SIG-funded model in 2011–2012 and 180 schools not implementing a SIG-funded model in 2011–2012 were used in the analysis for this figure. A range is provided for the sample size because nonresponse varied across items. We conducted statistical tests for whether the results differed for schools implementing a SIG-funded intervention model in 2011-2012 and schools not implementing such a model, and none of the differences were statistically significant at the .05 level using a two-tailed test.
For more information on the full study, please visit: