School Districts' Perspectives on the Economic Stimulus Package

School Improvement Grants Present Uncertainty and Opportunity

August 2010

Background

The American Recovery and Reinvestment Act of 2009 (ARRA), also known as the economic stimulus package, appropriated an extra $3 billion for School Improvement Grants to help reform persistently low-performing schools. With the $500 million already provided specifically for this purpose through Title I of the Elementary and Secondary Education Act (ESEA), which serves low-achieving children in low-income areas, the ARRA appropriation brings the total funding for school improvement to $3.5 billion, available for use through September 30, 2013.

School Improvement Grant funds under ARRA are allocated to states, which then distribute the funds to school districts. Districts use the funds to improve the roughly 5,000 schools in the country that have been identified as lowest-performing by their state. These include both troubled Title I schools and schools that are eligible for but do not receive Title I funds, such as high schools in districts that have chosen to focus Title I funding on elementary schools. Most participating school districts received funds in the spring of 2010 and will begin to use them in school year 2010-11.

ARRA sets out extensive new requirements for School Improvement Grants. To receive these ARRA grants, districts must agree to use one of the following four intervention models endorsed by the U.S. Department of Education:

- *Turnaround*, which includes replacing the school principal and no more than 50% of the school staff and implementing a new or revised instructional program

- *Restart*, which involves closing the school and restarting it under charter management or under an educational management organization

- *Closure*, which refers to closing the school and enrolling its students in higher-performing schools in the same district

- *Transformation*, which encompasses a variety of options, including increasing the effectiveness of teachers and leaders and extending learning time

Although most districts that receive ARRA supplemental School Improvement Grants will just be starting to implement one of the four reform models in targeted schools in the 2010-11 school year, the Center on Education Policy (CEP) wanted to learn about districts' prior experience with each of these intervention models. Many of these districts have already implemented school improvement efforts in response to the requirements of the No Child Left Behind Act and may have used one or more of the specified reforms as part of their efforts to increase student achievement.

The information in this report is drawn from the responses of a nationally representative sample of school districts to a broader CEP survey on ARRA administered in the spring of 2010. Survey responses were weighted to allow us to draw conclusions for all districts in the 50 states based on this representative sample. More information about our ARRA survey is available at www.cep-dc.org in a Study Methods appendix accompanying this report.

This is CEP's third report on ARRA. The first, released in December 2009, focuses on state-level implementation. The second, published in July 2010, describes school districts' use of State Fiscal Stabilization Fund (SFSF) grants and the supplemental funding provided by ARRA for the Title I program and the Individuals with Disabilities Education Act. The second report contains additional information about districts' use of SFSF grants to provide supports and interventions to turn around low-performing schools; this activity is one of four reforms that states and districts must address to receive SFSF funding.

Key Findings

Several key findings about School Improvement Grants emerged from our survey:

- **More than one-third of the nation's school districts were unfamiliar with each of the four models, and few districts had implemented any of them.** A significantly smaller percentage of city districts[1] were unfamiliar with the models than were other types of districts; city districts may be more familiar with the models because they have more schools in improvement. Less than 12% of districts had implemented any of the models in one or more schools.

- **Less than 12% of districts had received assistance from the state for each of the four improvement models.** This may be because states are assisting only those districts with the lowest-performing schools or have not yet spent their ARRA School Improvement Grant funds. More districts—although still a small minority—had received state assistance with the turnaround and transformation models than with the restart and closure models.

- **Districts that implemented the models had varying degrees of success with them.** On our survey, districts could respond that the model had produced "positive results" or "unknown, mixed, or poor results." For three of the models (turnaround, restart, and closure) there were no statistically significant differences in the estimated percentages of districts that had positive results and those that had unknown, mixed, or poor results. For the transformation model, however, roughly 91% of the districts that tried this model had positive results, while an estimated 9% had unknown, mixed, or poor results.

District Experience with the Four Intervention Models

As shown in **table 1**, more than one-third of the nation's school districts were unfamiliar with each of the four required intervention models for improving low-performing schools. Less than 12% of districts had implemented

Table 1. Percentages of districts that were unfamiliar with school improvement models and percentages that had implemented the model

School improvement model	Districts unfamiliar with the model	Districts that had implemented the model
Turnaround	36%	11%
Restart	40%	1%
Closure	38%	1%
Transformation	38%	6%

Table reads: About 36% of districts were unfamiliar with the turnaround model of improving schools; about 11% of districts had implemented this model.

Note: The differences among the percentages in the **"unfamiliar"** column are not statistically significant. The difference between the turnaround model and the transformation model in the **"implemented"** column is not statistically significant; neither is the difference between the restart and closure models. The specific confidence intervals for the responses in this table can be found at www.cep-dc.org in appendix 3, *Confidence Intervals for School Improvement Survey Responses*.

Source: CEP Survey of Local Education Agency Use of ARRA Education Funds, spring 2010.

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[1] Definitions for different types of districts are included in the Study Methods appendix at www.cep-dc.org.

any of the models in any of their schools, as the table also reveals. Some districts may be unfamiliar with the models and inexperienced with implementation because they have no schools that meet their state's criteria for low-performing schools. Other districts may need more information about the four models. The slight variations by type of model were not statistically significant.

We also analyzed the data on districts' familiarity with the school improvement models by the type of community the district served—city, suburb, town, or rural area. The only significant difference we uncovered was a greater familiarity with each of the four improvement models among city districts than among other types of districts. Specifically, the proportion of city districts that were *unfamiliar* with each of the improvement models ranged from about 3% for the transformation model to about 8% for the restart model. Among districts in suburbs, towns, and rural areas, the percentages unfamiliar with a particular model ranged from about 26% to 50%, depending on the model and type of district. We speculate that city districts had more low-performing schools and, therefore, had more information about the four models. There were no other significant differences by type of community served.

State Support for District Implementation of the Four Reform Models

States are charged with assisting districts in improving their lowest-performing schools and may reserve 5% of the state's total ARRA School Improvement Grant to use for state support for school improvement. As shown in **table 2**, less than 12% of districts received assistance from the state for any of the four school improvement models. However, significantly larger proportions of districts received state assistance with the turnaround or transformation models than with the restart or closure models. Our survey was conducted in the spring of 2010, so it is possible that states will provide more assistance to districts during 2010-11, when schools begin implementing the improvement models. It may also be that states have limited their assistance thus far to districts with the lowest-performing schools.

Table 2. Percentages of districts receiving state assistance for each required school improvement model

School improvement model	Percentage of districts
Turnaround	11%
Restart	1%
Closure	1%
Transformation	7%

Table reads: An estimated 11% of districts received assistance from their state with implementing the turnaround model for school improvement.

Note: The difference in percentages between the turnaround model and the transformation model is not statistically significant, nor is the difference between the restart and closure models. The specific confidence intervals for the responses in this table can be found at www.cep-dc.org in appendix 3, *Confidence Intervals for School Improvement Survey Responses.*

Source: CEP Survey of Local Education Agency Use of ARRA Education Funds, spring 2010.

Results for the Limited Number of Districts That Implemented the Models

Approximately 14% of districts have implemented at least one of the four improvement models in one or more of their schools. Our survey asked these districts about the results of their implementation. Districts could report that the model had "positive results" or "unknown, mixed, or poor results."

Among the districts that had tried each model, we found no significant differences in the percentages of districts reporting positive results and those reporting unknown, mixed, or poor results for three of the models (turnaround, restart, and closure). One must remember, however, that only small percentages of districts had tried each of these models. For those that have, it may be too soon to see meaningful differences in results, especially in terms of student outcomes.

For the fourth model, the transformation model, we did find a statistically significant difference in results. Among the small share of districts (about 6%) that have implemented this model, roughly 91% had positive results, while an estimated 9% had unknown, mixed, or poor results. Here, again, it is important to note that these findings are based on the very small numbers of districts and schools that had implemented the models and that it may be too early to see changes in student achievement attributable to any of the models.

We also examined these data by the type of community served and found no statistically significant differences. In other words, districts serving different types of communities reported similar results for each of the four models.

Conclusion

Our national survey revealed that many districts were unfamiliar with the four school improvement models required for use of the ARRA School Improvement Grants. Only a small minority of districts had experience implementing one or more of these models. For each of the four models, fewer than 12% of districts received state assistance. Among districts that had implemented and seen results for the four models, there were no significant differences in the percentages experiencing positive results and those experiencing unknown, mixed, or poor results, except for the transformation model, for which more districts reported positive results. In all these analyses, it is possible that the percentages of districts are low because few districts have schools that meet their state's definition of low-performing.

Examining the survey data by the type of community, we found one important difference among districts serving cities, suburbs, towns, or rural areas. Larger percentages of districts serving suburbs, towns, and rural areas were unfamiliar with the four models than districts serving cities were. We speculate that city districts have more low-performing schools and therefore may have more experience implementing the models.

As districts across the nation begin implementing the four models as part of their ARRA School Improvement Grants, it will be important to track and publicize their experiences so that other districts can learn more about improving low-performing schools. This tracking should include monitoring of which of the four models districts use, how states provide assistance with each of the models, and what results districts see from the models. In addition, this information should be disaggregated by district type to ensure that districts in towns and rural areas, in particular, are not disadvantaged in the supports they receive for the four models.

ARRA School Improvement Grants are not only a source of much needed funding for low-performing schools; they are potentially a means for gaining knowledge about how to assist and improve these schools. As a follow-up to this report, we plan to conduct a second survey in the winter of 2010-11 that will explore how school districts' knowledge and implementation of ARRA has progressed.

Credits and Acknowledgments

Appendices

School Districts' Perspectives on the Economic Stimulus Package: School Improvement Grants Present Uncertainty and Opportunity

Appendix 1: Study Methods

This appendix describes the sampling procedures used to select potential districts to participate in CEP's *Survey of Local Education Agency Use of ARRA Education Funds*. Also described are the methods used to develop and administer the survey and the analytic process used to obtain population estimates from the survey responses. The survey was developed, administered, and analyzed with support from Policy Studies Associates, CEP's contractor for this project.

SURVEY SAMPLE

We started with the publicly accessible dataset from the 2007-2008 Common Core of Data Local Education Agency Universe Survey conducted by the National Center of Education Statistics (NCES). This dataset contains information on 18,090 elementary and secondary education agencies located in the 50 states and the District of Columbia; American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands; the Department of Defense schools; and the Bureau of Indian Education. We chose to use the 2007-08 edition of the survey because when we drew the sample, the 2008-2009 dataset was in preliminary form.

From the dataset of 18,090 education agencies, we removed the 4,778 agencies that did not match our study population criteria. Specifically, we removed the agencies that were located outside of the 50 states and the District of Columbia; that were not operating; or that were regional education service agencies, federally and state-operated agencies, charter agencies, or designated as "other education agencies."

The dataset also included agencies that were component(s) of a supervisory union sharing a superintendent and administrative services with other local school districts. In these cases, we retained the agency defined as the "supervisory union" and removed the component agencies associated with the unions. Finally, we removed the local education agencies (LEAs) that did not directly educate students through the employment of teachers and the operation of school buildings; many of these agencies represented towns that sent their students to neighboring districts or cooperative districts. We also removed agencies that solely served special segments

of the population, such as vocational centers, correctional facilities, schools for the blind or deaf, and schools of performing arts. **Exhibit 1** summarizes the edits that we made to the dataset to arrive at our sample frame.

Exhibit 1. Variables Used to Build Sample Frame

Variable Name	Variable Description	Use*	LEAs Subtracted	Unduplicated Deletions**
FIPST	Federal Information Processing Standards (FIPS) state code	Eliminated LEAs from locations outside of the 50 states and the District of Columbia (X>56; n=42).	42	42
BOUND07	The boundary change indicator is a classification of changes in an education agency's boundaries since the last report to NCES	Eliminated LEAs that had closed (X=2; n=149), were temporarily closed (X=6; n=35), or were scheduled to be operational in the future (X=7; n=56).	240	282
TYPE07	Agency type code	Eliminated agencies defined as "regional education service agencies" (X=4; n=1,203), "state-operated agencies" (X=5; n=275), "federally operated agencies" (X=6; n=36), "charter agencies" (X=7; n=2,126), and "other education agencies" (X=8; n=195).	3,835	3,925
UNION07	Indicator linking supervisory units and component agencies	Eliminated agencies that were represented in the dataset by a "supervisory union." Eliminated LEAs from CA (n=12), IN (n=3), NH (n=175), NYC (n=34), VT (n=291), and VA (n=2); eliminated the supervisory unions from MT (n=56).	573	4,498
SCH07	Number of schools associated with the agency	Eliminated LEAs that did not directly educate students or that served special populations of students.	280	4,778

Exhibit reads: The FIPST variable eliminated LEAs that existed outside the 50 states and the District of Columbia; this variable netted 42 deletions, which brought the total number of unduplicated deletions to 42.

* The "X" stands for the variable name in each row.

** The unduplicated count is cumulative from top to bottom.

We used the "ULOCAL07" variable in the NCES dataset, which is an indicator of a district's location relative to a populous area, to stratify the sample frame by geographic location and area population density. The NCES dataset contained four main location types, as well as three subtypes with each location type. We used the four main types but not the subtypes in our stratification—in other words, we used the main location type "city" as a stratum, but we did not create additional strata to distinguish among the subtype locations of "large," "medium," or "small." **Exhibit 2** presents definitions for the main location types, identifies the number of districts in the sample frame in each location type, reports the number of students who attend school in the districts in the sample frame, and identifies the number of districts in each location type that we sampled. We used disproportional stratification in order to include sufficient numbers of large districts in our analyses.

Exhibit 2. Definitions and Frequencies of Sample Strata

Locale Type	Definition[1]	Number (and percent) of districts in the sample frame	Number (and percent) of K-12 students in the sample frame	Number (and percent) of districts in the sample
City	Territory inside an urbanized area (a "densely settled area that has a census population of at least 50,000") and inside a principal city (the "largest city inside the urbanized area")	751 (5.6)	13,447,851 (28.8)	180 (30.0)
Suburb	Territory inside an urbanized area (a "densely settled area that has a census population of at least 50,000") and outside a principal city (the "largest city inside the urbanized area")	2,741 (20.6)	18,384,606 (39.4)	180 (30.0)
Town	Territory inside an urban cluster (a "densely settled area that has a census population of 2,500 to 49,999")	2,502 (18.8)	5,904,016 (12.6)	120 (20.0)
Rural	Territory outside of urbanized areas ("densely settled areas that have a census population of at least 50,000") and urban clusters ("densely settled areas that have a census population of 2,500 to 49,999")	7,318 (55.0)	8,967,808 (19.2)	120 (20.0)
	Totals	*13,312 (100.0)*	*46,704,281 (100.0)*	*600 (100.0)*

Exhibit reads: Locales defined as "city" consist of 5.6% of the districts in the sample frame, contain 28.8% of the students who attend the districts in the sample frame, and represent 30% of the districts sampled for the study.

[1] We derived the definitions from U.S. Census Bureau definitions: www.census.gov.

Many states divide their densely populated areas into "elementary school districts" and "union high school districts." For a densely populated area, we retained the elementary and secondary school districts in the sample frame. When drawing the sample, we excluded districts if the sample already included another district from the same Core Based Statistical Area (CBSA).

SURVEY DEVELOPMENT

The challenge in developing the survey was to strike a reasonable balance between collecting enough data to describe how LEAs are using ARRA education funds and minimizing the response burden. To that end, the survey included 29 close-ended items that ask about (1) current and projected funding for elementary and secondary education, (2) the use of State Fiscal Stabilization Funds, (3) the use of ARRA Title I funds, (4) the use of ARRA IDEA funds, (5) district efforts to address the four ARRA assurances and involvement in preparing state applications for Race to the Top grants, and (6) challenges and assistance needs associated with using ARRA education funds. A final question asked districts if they were better off with ARRA education funds than they would have been without them. Some of these items had multiple

response options, and four items included space for respondents to provide additional information about their strategies and experiences in using ARRA education funds.

As part of survey development, we sent a draft of the instrument to central office administrators in LEAs in three states. We asked the administrators to review the instrument and provide feedback on the appropriateness and clarity of the wording and on the focus of the survey questions. We also asked them to estimate the amount of time required to complete the survey and to indicate who else in their districts might be involved in responding to individual items. The final version of the survey reflects the feedback we received.

SURVEY ADMINISTRATION

Our recruitment of survey respondents from the districts in our sample involved multiple steps. In February 2010, CEP contacted the superintendents of the districts in the sample to explain the purpose of the survey and to provide background information on CEP and its previous report and research on state-level implementation of ARRA. In addition, CEP asked superintendents to identify the person in their district who would be responsible for completing the survey. In some districts, for example, the appropriate respondent was the chief financial officer, while in others it was the director of federal programs or the director of research and/or accountability. Many districts found it necessary to ask several members of the staff to complete various parts of the survey.

We gave superintendents approximately one week to respond to the initial invitation before initiating follow-up calls to request the contact information for the designated survey respondent. We made up to three telephone attempts about a week apart to each non-responding superintendent before sending a final attempt letter. Through the contacts that we made with the superintendents of the districts in the sample, we received 450 responses (75.0% of the sample). Of those who responded, 290 (48.3%) agreed to participate and designated a district administrator to complete the survey, while 160 (26.7%) declined to participate.

Beginning in March 2010, we sent the survey to the designated respondents. Within two days of receiving the name of the designated respondent from the superintendent, we sent an email message to the respondent, with the survey attached, asking him or her to respond to the survey. Respondents could complete the survey as an electronic form or as a paper-and-pencil instrument that could be returned by fax or regular mail.

We began following up with non-respondents one week after the initial distribution of the surveys. This process continued in one-week intervals. After the third call, we sent letters asking non-respondents to complete the survey. The completed surveys were submitted between March and May of 2010. We received completed survey documents from 233 districts, for a response rate of 80.3% of the districts that agreed to participate and 38.8% of the original sample of 600 districts.

DATA ANALYSES

To obtain the population estimates from the sample responses, we multiplied each sample response by a weighting factor specific to that particular stratum and question. The weighting factors were stratum-specific because the proportion of districts included in the sample from each stratum was not equal (i.e., we used a disproportional stratified sample). The weighting variables were also question-specific because we dealt with missing responses by eliminating the cases from the set of responses used in the analysis. This approach to treating missing data has the advantage of simplifying the reporting of results; it has the disadvantage of increasing the estimated standard errors.

We calculated both the standard error and confidence interval for each of the estimated response frequencies presented in CEP's report describing the survey findings. The estimated standard error of a proportion provides information about the accuracy of the percentage estimate. The size of the standard error is influenced by the distribution of responses, the number of respondents, and the size of the population. Estimated standard errors are used to construct confidence intervals for the estimated percent. The confidence interval for a proportion indicates the degree of certainty that the true value for the population of all districts in the nation is included in a particular range. For proportions, the confidence interval is not symmetric relative to the estimated percent (except in the case where the estimated percent equals 50); this is because a proportion has a lower and upper bound (0 and 1, respectively), and the boundary affects the calculation of the interval. Additional information about the confidence intervals for specific responses is available in appendix 3 accompanying CEP's report.

Across all of the estimated response frequencies, the median standard error is 4.2%; the standard errors range from 0.0% to 7.3%. The standard errors result in 95% confidence intervals that have a median lower bound 7.1 percentage points below the estimate and a median upper bound 9.2 percentage points above the estimate; the lower bound of the confidence intervals range from 0.0% to 14.4% of the estimate, while the upper bound of the confidence intervals range from 0.0% to 14.1% above the estimate. The size of the interval does not affect the level of certainty (95%) that the interval captures the true population value.

Appendix 2: General Information about Confidence Intervals and Statistical Significance

The tables and footnotes in the report provide information about whether the difference between estimated percentages is statistically significant. Statistical significance signals whether this difference is likely to be due to chance. If it appears that the difference in estimated percentages is due to chance (i.e., the difference is not statistically significant), then we cannot say that districts are more likely to do one thing than another. For example, 36% of districts were unfamiliar with the turnaround model for improving schools, while 40% were unfamiliar with the restart model. The difference between 36% and 40% is not statistically significant, so we cannot say that a higher percentage of districts was unfamiliar with the restart model.

One the other hand, if the difference is larger than is likely to be explained by chance alone, then the estimated percentages can be compared. For example, we estimate that 11% of districts have implemented the turnaround model for improving schools, while 1% have implemented the restart model. The difference between the 11% and 1% is statistically significant, and so we can say that fewer districts have implemented the restart model.

One method of determining the statistical significance in the difference between two percentages is to compare the confidence intervals of the two percentages. Confidence intervals provide information about the accuracy of the estimated percentages. If the confidence intervals for two percentages do not overlap, then the difference is statistically significant. Appendix 3 contains the specific confidence intervals for the tables used in this report and illustrates how ranges of estimated percentages (the confidence intervals) are used to determine statistical significance.

Appendix 3: Confidence Intervals for Survey Responses

The figures in this appendix display the confidence intervals for the survey responses relating to school improvement grants shown in tables 1 and 2 in the full report. In figure A1a, for example, the bars depict the confidence intervals for the estimated percentages of districts that were unfamiliar with each of the four school improvement models. All four bars overlap, indicating that the differences between these four percentages *are not* statistically significant. Conversely, in figure A1b, the bars showing the confidence intervals for the estimated percentages of districts that have implemented the turnaround and restart models do not overlap, indicating that the difference between these percentages *is* statistically significant.

Figure A1a. Percentages of districts unfamiliar with school improvement models
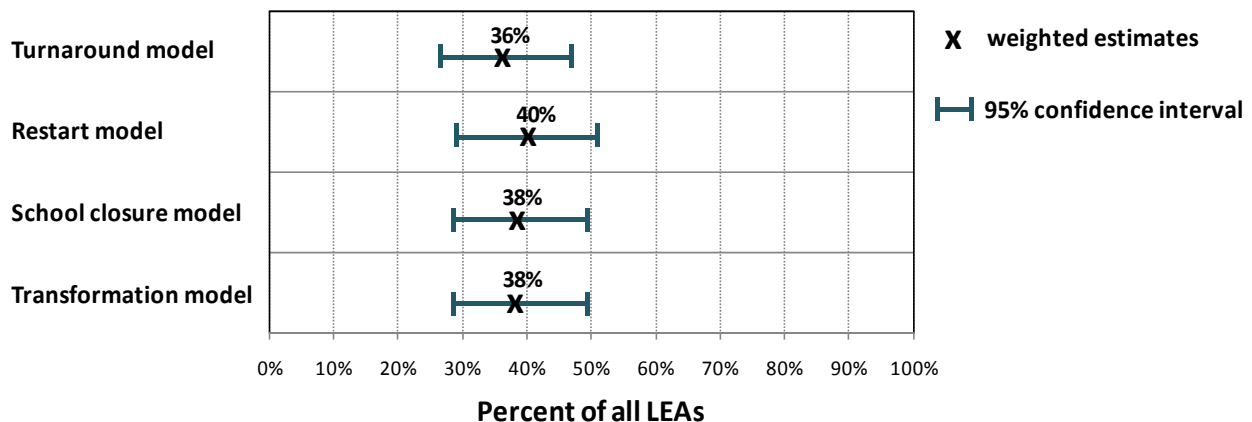

Figure reads: An estimated 36% of districts were unfamiliar with the turnaround model for improving schools, while an estimated 40% were unfamiliar with the restart model, an estimated 38% were unfamiliar with the school closure model, and an estimated 38% were unfamiliar with the transformation model.

Note: The 95% confidence intervals for the estimates in the figure are as follows: 36 (26, 47); 40 (29, 51); 38 (28, 49); 38 (28, 49). This means, for example, that we are 95% certain that the actual percentage of districts that were unfamiliar with the turnaround model is between 26% and 47%.

Source: CEP Survey of Local Education Agency Use of ARRA Education Funds, spring 2010.

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Figure A1b. Percentages of districts that implemented school improvement models
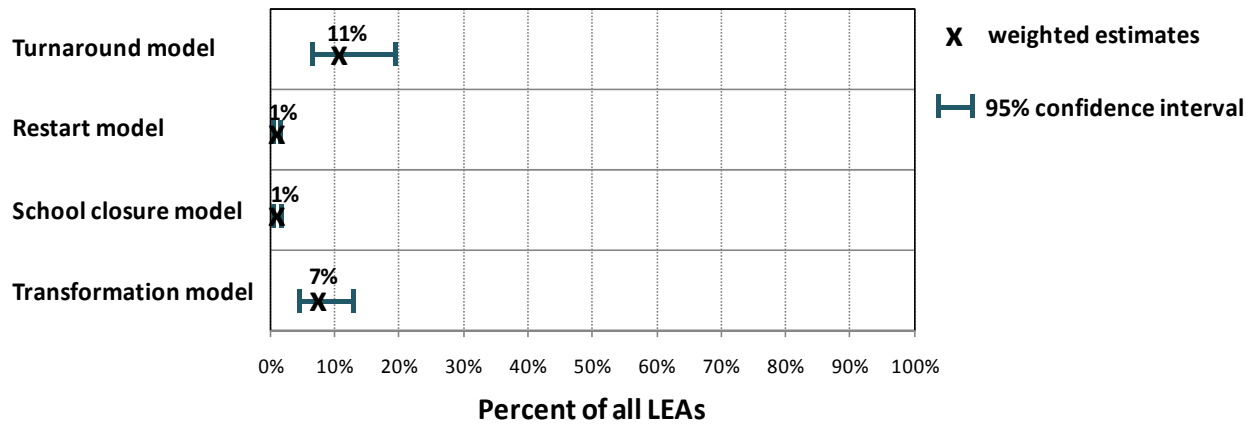

Figure reads: An estimated 11% of districts had implemented the turnaround model for improving schools, while an estimated 1% had implemented the restart model, an estimated 1% had implemented the school closure model, and an estimated 6% had implemented the transformation model.

Note: The 95% confidence intervals for the estimates in the figure are as follows: 11 (6, 19); 1 (<1, 2); 1 (<1, 2); 6 (3, 12). This means, for example, that we are 95% certain that the actual percentage of districts that had implemented the turnaround model is between 6% and 19%.

Source: CEP Survey of Local Education Agency Use of ARRA Education Funds, spring 2010.

Figure A2. Percentages of districts receiving state assistance for each school improvement model
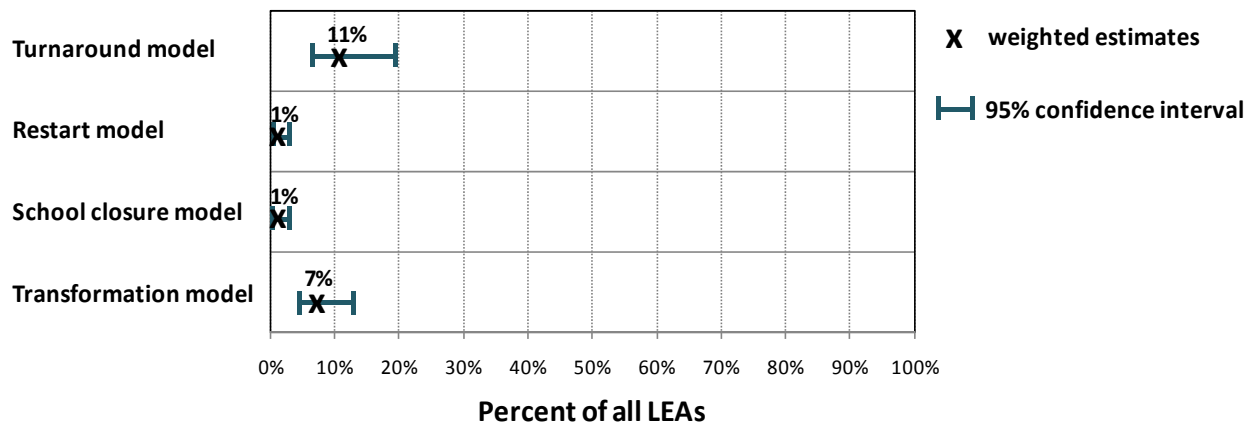

Figure reads: An estimated 11% of districts received state assistance with the turnaround model for improving schools, while an estimated 1% received assistance with the restart model, an estimated 1% received assistance with the school closure model, and an estimated 7% received assistance with the transformation model.

Note: The 95% confidence intervals for the estimates in the figure are as follows: 11 (6, 19); 1 (<1, 3); 1 (<1, 3); 7 (4, 13). This means, for example, that we are 95% certain that the actual percentage of districts that received state assistance with the turnaround model is between 6% and 19%.

Source: CEP Survey of Local Education Agency Use of ARRA Education Funds, spring 2010.