Study Methods

For the report:

Opportunities and Obstacles:

Implementing Stimulus-Funded School Improvement Grants in Maryland, Michigan, and Idaho

The purpose of this study was to describe how Title I 1003(g) School Improvement Grants awarded through the American Reinvestment and Recovery Act (ARRA) in the 2010-11 school year were implemented at the state, district, and local levels in three specific states (Idaho, Maryland, and Michigan). The study also examined participants' views of the successes and challenges of implementation.

Participants

Participants for this study were selected using a number of purposeful sampling strategies. Through purposeful sampling, we hoped to make the best use of our resources by selecting "information-rich cases… from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (Patton, 2002, p. 230). Though a small sample size prevented us from making empirical generalizations (which, as noted, is not the purpose of our study), purposeful sampling did, as Patton explains, "yield insights and in-depth understandings" about the ARRA SIG program within each case (p. 230).

Selection of states

The three state participants (each serving as a separate case study) were selected for maximum variety sampling (Patton, 2002) based on the criteria of geographic location,

the types of schools in each state receiving ARRA SIGs, and the school improvement models chosen by those schools in each state.

For example:

- In Idaho, our Western state, ARRA SIG tier 1 and 2[1] schools (N=13) are predominately rural, and those receiving grants (N=6) are using the transformation model.

- In Maryland, our mid-Atlantic state, ARRA SIG tier 1 and 2 schools (N=16) are mostly urban. Schools receiving grants (N=11) are in Baltimore or Prince George's County, a suburb of Washington, D.C., and are using the restart and turnaround models.

- In Michigan, our Midwestern state, ARRA SIG tier 1 and 2 schools (N=108) are spread throughout the state in mostly urban and suburban areas, with a just few rural schools represented. Schools receiving grants (N=28) are using the turnaround and transformation models.

Selection of ARRA SIG schools

CEP selected two schools receiving ARRA SIG funds in each state for the study, following Patton's (2002) maximum variety sampling. CEP researchers consulted with state education agency personnel and reviewed ARRA SIG data in Hurlburt et al., 2011 to select a sample of schools in each state that represented a variety of ARRA SIG reform models and school locales (i.e. rural, urban, suburban). For example:

[1]Under revised federal guidance, states must identify three tiers of schools eligible for ARRA SIGs. Tiers 1 and 2 consist of the "persistently lowest-achieving" schools, which are among the lowest-achieving 5% in the state and receive highest priority for funding. Tier 3, which consists of other schools identified for improvement after failing to meet the accountability requirements of the No Child Left Behind Act (NCLB), may be considered for funding only after schools in tiers 1 and 2 have been funded. More information about these tiers is included in the full report.

- In Michigan, two-thirds of the ARRA SIG recipient schools in the state are implementing the transformation model, while one-third are implementing the turnaround model. These schools are predominantly urban and suburban. In Michigan, we selected one urban school in a large city that was implementing the turnaround model and one urban school in a small city that was implementing the transformation model.

- In Maryland, the state has 7 urban (Baltimore) and 4 suburban (Prince George's County) schools. Five of these schools are implementing the restart model, and 6 are implementing the turnaround model. Therefore, we selected one school in Baltimore that is implementing the restart model and one school in Prince George's County that is implementing the turnaround model.

- In Idaho, 5 of 6 eligible schools are rural, and the remaining school is suburban. All of these schools chose the transformation model. Therefore, we chose one rural and one suburban school in Idaho, both implementing the transformation model.

In Maryland, researchers also consulted with district-level personnel about school selection. The schools selected for this study represent key elements of ARRA SIG as implemented in each state but are *not* necessarily representative of the entire population of schools within that state.

Selection of comparison schools

For each of the two schools receiving ARRA SIG funds selected in each state, CEP attempted to select a matching school (ideally in the same district) that was identified as tier 1 or 2 under ARRA SIG but was *not* awarded these funds in 2010-11. These non-recipient schools, when possible, were selected based on homogenous sampling, which involved matching the two schools selected that *are* receiving ARRA SIG funds with non-recipient schools that are similar based on criteria such as grade levels served, locale,

geographic location, percentage of non-white students, percentage of low-income students, and percentage of non-proficient students on state tests.

In Michigan, we were able to follow our criteria as described above. In Idaho, matching the rural recipient school with another non-recipient in the same district was not possible, since each district had only one tier 1 or 2 school. Therefore, after consultation with state education department personnel, CEP researchers matched the rural school in Idaho with a school in another district that was similar in size and the other criteria. The suburban school in Idaho could not be matched since there were no other suburban schools in tier 1 or 2.

In Maryland, the Baltimore City Public Schools had tier 1 and 2 schools that were eligible for but did not receive ARRA SIG funds, but these schools did not wish to participate in the study; therefore, we were not able to identify matching non-recipient schools for that district. The Prince George's County Public Schools had no tier 1 and 2 schools that did not receive ARRA SIG funds; therefore, we selected two schools in tier 3 from this district.

We believe that this matching system resulted in a sample of school pairs in each state that are similar on some demographic and contextual variables. However, we acknowledge that the schools do not represent a perfect comparison. As expected, interviews captured some, but not all of these differences; therefore, comparisons were made cautiously.

Data Sources

Data were collected for this study from state and local participants and from the public domain. More specifically, in order to explore our research questions, data were collected and analyzed from the following sources:

- Interviews at the state, district, and school levels
- State and local documents pertaining to ARRA SIG

- An existing U.S. Department of Education data set containing demographic information, funding amounts, and ARRA SIG model selection information for all ARRA SIG eligible schools
- State test data for the ARRA SIG schools participating in the study, disaggregated by various student populations

Interviews at the state, district, and local levels

CEP conducted in-depth interviews with state and local officials responsible for implementing the ARRA SIG program. Local officials included the district official(s) responsible for school improvement funds and implementation in the selected schools and the principals of the schools that received ARRA SIG funds and the non-recipient comparison schools. In some cases, researchers also interviewed teachers at selected schools.

Our choices, including the selection of our interview participants, evolved as our study progressed, a common process in qualitative research. As we adapted our theories and research questions with each phase of data collection, we also reconsidered our choices of interview participants.

Semi-structured interview protocols were designed with the intent to collect data about program implementation, including information about these officials' general experiences and perspectives of successes and/or challenges of the program. The interview protocols were informed by prior CEP research on school improvement, as well as our knowledge of existing research and federal policies on school improvement. All protocols were also reviewed and revised by an external expert in school improvement policy research.

It is important to note that because we studied three individual states, the data collected from these interviews do not represent all states participating in the ARRA SIG program. Similarly, each school case within each state case does not represent all ARRA SIG

schools. Therefore, these interviews are illustrative of trends and examples in each state and school studied and are not generalizable beyond those contexts.

Interviews were conducted both in person and by phone for approximately one hour each. The interviews were digitally recorded, transcribed, and analyzed for trends by members of the research team. In addition, to ensure the accuracy of the data collected in interviews, CEP conducted "member checks," in which CEP researchers asked participants to review transcripts and/or reports resulting from the interviews for factual accuracy.

State and local documents pertaining to ARRA SIG

CEP reviewed state and local ARRA SIG applications, as well as state and local policy statements associated with ARRA SIG, all of which were publicly available.

U.S. Department of Education existing data set

CEP researchers used an existing data set published by the U.S. Department of Education (Hurlburt et al., 2011). For each of the states included in the ARRA SIG case studies, researchers collected demographic data from the ED data set for all tier 1 and 2 ARRA SIG-eligible schools (both recipients and non-recipients) and tier 3 schools in improvement under NCLB in school year 2010-11. Variables included the following:

- Number of students served
- Grade levels served
- Locale (rural, suburban, town, urban)
- Percentages eligible for free or reduced-price lunch
- Percentages by ethnicity (Asian, Black, Hispanic, Pacific Islander, White)
- Percentages of English language learners
- Percentages of special education students

Analysis

The research in Maryland, Michigan, and Idaho was modeled as a multiple-case study design (Yin, 2003) and allowed us to analyze the data in layers (state, district, and school level). Researchers began by analyzing the ARRA SIG applications and any other publically available documentation about the program. Through content analysis, these state and local documents were reviewed prior to conducting the state and local interviews. Content analysis—"a method for analyzing the message characteristics systematically… in a way that attempts to be duplicable and comparable"—allowed the researchers to generalize about the overall content of a document or a set of documents in order to track subtle differences or changes over time (Hesse-Bieber & Leavy, 2006, p. 47). Although we realize that the background and contextual knowledge gleaned from these documents influenced our interview protocols and data analysis, we feel it better informed our research questions and interview protocols.

Once interview protocols were developed for both state- and local-level interviews, interviews were conducted by the team of researchers. Often data from the state interviews, as well as from our document review and prior research, helped to inform the interview questions at the district and school levels.

Researchers reviewed and coded the interview transcripts independently to extract patterns and emerging themes, as well as exceptions to themes within and between the data sources. In some instances, we developed concept maps and matrices from these data as a tool to assist with the development of emergent themes. This type of collaborative analysis allowed researchers to check each other for biases and provided the benefit of multiple perspectives. Additionally, it allowed for themes and patterns to emerge across cases.

Throughout the data collection and analysis process, the researchers frequently met in person or communicated via telephone and e-mail about the interview findings, coding, and content analysis. Ultimately, we wrote summaries of state and local interviews and documents that described ARRA SIG implementation, as well as participants' views of

the successes and challenges of their school improvement efforts. We then used these summaries to determine cross-cutting themes.

References

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