Highlights from:

Study of High School Strategies for Instructional Improvement

Consortium for Policy Research in Education
Graduate School of Education
University of Pennsylvania

The research reported in this paper was conducted by the Consortium for Policy Research in Education (CPRE). Funding for this work was provided by the U.S. Department of Education's Institute of Education Sciences (Grant #R308A960003). Opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Institute of Education Sciences or the institutional partners of CPRE.
Introduction

Each year more high schools are identified as underperforming due to failure to make adequate yearly progress. To raise achievement, new performance expectations require teachers, schools, and districts to move beyond aligning curriculum, reallocating time, and other conventional approaches. In response, they are relying more and more on external school improvement organizations. Although U.S. schools since the early 1990s have increasingly turned to external sources of assistance for improving academic achievement, literacy, graduation rates, and other key problems, the challenge of making changes in schools, and high school in particular, is well documented (Siskin, 2003).

To better understand this challenge, researchers from the Consortium for Policy Research in Education (CPRE) are examining the efforts of five external reform organizations and their interactions with high schools. We focus on provider design strategies and challenges, the uses and perceived effects of the reforms in high schools, the mutual impacts of communication networks and reforms in schools, and the nature of school leadership in the implementation of reform efforts. Although not an evaluation, this project is particularly important and innovative because it makes the reforms and their impacts on schools simultaneous objects of investigation. Findings will allow schools and providers alike to select and strategize more carefully in order to maximize the potential for deep use of improvement strategies.

The research summarized in this paper draws from interview, survey, and observation data collected during 2004 and 2005 at 15 high schools across the country and from staff at five external assistance providers. The provider models, which include two whole school reform models, two literacy programs, and one strategy to increase data-driven instruction, were selected as representative of the types of external assistance found in high schools during previous CPRE research. The 15 schools in our sample were selected based on recommendations from the reform organizations. Each provider identified three schools with which they had collaborated for one to five years. Ten of the study schools (two from each of the five providers) were in their first or second year of implementation. Five “mature” sites had worked with their respective provider for more than three years. In this way, we were able to examine several phases of a given reform.

This paper summarizes the findings on the use and perceived effects of the five external provider reform models in the 15 high schools, focusing on the variables that seemed to explain differences in use across and within the models. The findings are preliminary. CPRE researchers revisited 10 of the 15 schools in 2005-06 and are in the process of analyzing these data. Again, this is NOT an evaluation of any of the models, nor a study of their implementation. We conceptualized “use” of the models along three dimensions:

- **Spread**: Encompasses basic levels of exposure to the reform (i.e., who knows about it and who does not, who received training and who did not); procedural enactment of reform elements (e.g., formation of small learning communities, elimination of low-level courses); the existence or absence of monitoring and support mechanisms; and the issue of fidelity to “non-negotiables” and/or modifications of the model.
• **Depth:** Includes a basic level of awareness and understanding regarding the purpose and goals of the reforms; changes in teacher or school-wide behaviors and the motivations behind them, such as a teacher’s decision to seek out training, or changes in school communication patterns; and the depth or extent of any changes in instructional practice.

• **Sustainability:** Since the vast majority of our sites had been working with the external reform organization for one or two years, we looked at potential sustainability as perceived by school staff.

**Explaining Variation in Use of External Models**

CPRE’s interim findings on the use and effects of five externally provided reform models in 15 high schools confirm some lessons learned from studies of implementation of external reforms in the elementary context. In particular, even among schools hand-picked by providers as examples of program use at different stages, there can be variation in use within provider models that exceeds differences attributable to implementation stage (Berends, et al., 2002a, 2002b). Across providers, use varied from almost non-existent to schools which seemed to have wholeheartedly embraced the reform and achieved some measure of both spread and depth. Other findings in line with the existing implementation literature include the greater difficulty of achieving depth over spread of reforms, particularly with regard to achieving changes in instruction, and the very tenuous nature of sustainability.

We identified six factors that appeared to explain our findings on use: design emphasis, training strategies, the role of leadership, the concept of teacher zones of enactment, school resources, and the existence or absence of a sense of urgency about reform.

**Design Emphasis**

Each design employs a theory of change calling for specific activities to be undertaken, assuming that certain outcomes or processes will unfold from those activities and ultimately advance the goals of the reform. In so doing, each design stresses certain aspects of school organization or practice while deemphasizing others. This emphasis is evident in the way provider resources (e.g., staff time, materials) are developed and deployed, and in the changes in school organization or instructional practice required by the designs. From the perspective of schools implementing these reforms, design emphasis is most evident in the degree to which certain elements of each design are prescriptive. While the overall level of prescriptiveness in the designs varies considerably, most require certain steps be taken in the implementation process. These prescribed components or processes are, in effect, the reforms’ levers for change.

Consistent with existing research on school reform implementation (e.g., Berends et al., 2002a, 2002b), our analysis suggests that components of the designs that were emphasized through prescriptiveness were most likely to be used by schools. But, while it appears that prescriptiveness leads to use, our analysis also suggests that prescribed components do not necessarily precipitate the kinds of changes intended by the design. For example, structural changes in schools, such as the creation of small learning communities, led to the development of closer relationships among faculty and staff, but there was little evidence that teachers changed their instructional practice by providing and receiving feedback and sharing strategies.
and experiences with their colleagues in these settings. In those models that focused on instructional change (the two literacy models), in some cases the design was adopted mechanically—teachers seemed to be “doing” the curriculum without necessarily “getting” it.

Instances of disconnect between adoption of prescribed components and the resulting changes (or lack thereof) intended by the designs raise three important points with respect to factors affecting use. First, it seems that prescriptiveness is a double-edged sword. On the one hand, it seems to ensure a measure of compliance in adoption. On the other hand, that compliance sometimes looks like “going through the motions” rather than making substantive changes in school organization or instructional practice. Second, the relationship between adoption of specific design components and the resulting outcomes is grounded in provider assumptions about school capacity, defined as both the “will and skill” of teachers or administrators and the material resources available to them. With respect to the latter, the designs were significantly undermined when those resources were unavailable. Finally, all of the designs are based on the fundamental assumption that at some point in the implementation process, school staff will recognize the need to change and come together to support reform. Yet, such will to change was not always evident. In its absence, use of the designs tended to remain superficial, even when spread throughout a school.

**Training**

It almost goes without saying that whenever a new reform model is introduced into a school a certain amount of training and technical assistance is essential to ensure that it is accurately and confidently enacted, and all of our providers make training a key dimension of their work. The costs associated with training and technical assistance affect what providers offer and/or schools receive, as well as what strategies and targets are chosen. Our data confirm many other studies’ findings that the quality, quantity, and depth of the training and technical assistance offered as well as the training strategy affects the degree to which schools and/or districts can push the reform deeper and/or wider across their school environments (e.g., McLaughlin and Mitra, 2001; Corcoran, 2003).

The provider models differ with regard to who is trained directly by the provider, versus who is trained by others (train-the-trainer or turn-key model); several providers also rely on both types of training. Although a turn-key model is far less costly and may facilitate greater spread of reform, we found a clear relationship between direct training by the provider and greater depth of use. Another element influencing the effect of training on use was whether the training offered was voluntary or mandatory, and what incentives existed for participation. Here too, mandatory training contributed to spread, while some degree of voluntarism seemed to contribute to depth, but could impede spread. A third element related to training and affecting use was the existence, frequency, and character of ongoing support and technical assistance at the school and classroom levels.

**Role of Leadership**

The models differ in regard to whether leadership roles are specified or assumed, as well as to how they are defined. To judge from our data on use of the reforms in schools, however,
leadership in support of the program divided roughly into five discrete tasks: (1) ensuring that the basic structural conditions existed for program implementation (e.g., time in the schedule, adequate computer hardware); (2) using formal authority to create pressure for change; (3) disseminating knowledge and information about the reform; (4) assisting teachers in making the structural and/or instructional changes called for by the program; and (5) example setting for the program. Within our sample of schools, these five tasks were undertaken by a range of individuals or entities, often with the same person or entity involved in more than one task. In all sites, the presence or absence of a person or persons engaged in these tasks was an explanatory factor for use: Where all five tasks were being addressed and addressed well, use generally exceeded expectations; where none was discernible, use was limited or non-existent.

Zones of Enactment

Another factor that may explain some of the observed variation in use across the five designs is teachers’ “zones of enactment.” Studying teachers’ ways of understanding a mathematics reform initiative and its influence on their practice, Spillane (1999) found that even in cases where teachers were aware of or supported reform, the way in which they adopted it seldom challenged or fundamentally altered the “core” of their instructional practice. Specifically, he found that most teachers enacted some of the mechanics of reforms without fully grasping their core ideas, ultimately resulting in superficial change in instructional practice. To explain this discrepancy, Spillane suggested that each teacher has his/her own “zone of enactment,” shaped by his/her “capacity, will, and prior practice.”

While our data and methodology are not suited for identifying and describing variation across teachers’ zones of enactment, the level and type of adoption of external reform among teachers in our schools was very similar to those in the study described above, especially for the designs focused on instruction. Specifically, we found that teachers were often willing and able to adopt procedural aspects of reform, but seldom appeared to grasp the deeper concepts embedded in those procedures. It appears that the further a strategy required teachers to depart from their typical classroom practice, the less likely they were to use the strategy with regularity.

School Resources

The level of and access to three types of school resources—money, time, and materials—also contributed to the observed variation in use both across schools within a design and across the five designs. There were some areas where schools could, and did, implement the designs by reallocating existing resources, such as funding professional development, reorganizing their staff into small learning communities, and/or rescheduling school time to provide for common planning time. There were areas, however, where the designs required additional resources, including a school facilitator, additional teachers to reduce class sizes, technology to access and analyze student data, and extensive professional development and/or training of teachers. Problems arose when schools could not meet these needs by reorganizing existing resources alone but required additional resources, which districts may have unable or unwilling to provide.

Sense of Urgency
A large body of literature on change, both in schools and in the business world, emphasizes the importance of individuals within an organization believing that change is necessary as a prerequisite to undertaking it (e.g., Heifetz, 1994; Kotter, 1995). Although we did not specifically ask about the perceived necessity of change in the first rounds of interviews, we did find differences among schools with regard to a sense of urgency around change. The sense of urgency, in turn, appeared to have an effect on use, particularly with regard to early implementing sites. Sometimes, the sense of urgency paralleled the school’s compliance status with state or federal mandates. As also found in previous CPRE research, accountability status was not necessarily always an accurate predictor of the existence of a sense of urgency (Goertz & Massell, 2005; Gross & Goertz, 2005). Leadership appeared to be a strong intervening variable in determining how a sense of urgency was communicated throughout the school and whether it translated into a positive force for use.
References


