

# Adoption: Exploring the Initiation of Comprehensive School Reform Models

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# **Adoption: Exploring the Initiation of Comprehensive School Reform Models**

#### **Abstract**

The process through which a school adopts a comprehensive school reform (CSR) model has been suggested to be a key element in the lifecycle of school reform, contributing to stakeholder buy-in and subsequent implementation. In this paper, we study the model adoption process, both on a national scale with survey data and in closer depth with qualitative case study data. We conclude that the voting process can indeed contribute to school-level factors that are supportive of implementation. However, the quality of the adoption process still varies greatly between schools, and a favorable adoption process does not necessarily ensure model implementation. Indeed, other school-level factors, such as strong principal leadership or professional community, can counterbalance the positive or negative quality of the adoption process.

# Adoption: Exploring the Initiation of Comprehensive School Reform Models

#### Introduction

Truly comprehensive school reform is a lengthy process. It begins with the decision to adopt a model; develops through successive layers of professional development, dialogue, and experimentation with new strategies; and ultimately becomes embedded in the daily culture and practice of a school. Along this path, however, many schools encounter challenges—developer supports may be inadequate, school leadership may not support the reform, and real change may fail to take hold. In this complex and demanding process, researchers have suggested that the first steps toward reform are of central importance. This paper will explore the processes through which schools embark on comprehensive reform.

For schools to successfully enact comprehensive school reform (CSR), they must secure the active engagement of teachers; it is teachers who must commit to the hard work of educational change. For teachers to become substantively engaged in implementation, they must first "buy into" the general premise of reform. They must accept the general premises that reform is important and that the proposed reform in particular is appropriate for the school. Frequently, studies of school reform suggest that the best mechanism through which schools can ensure teacher buy-in is the adoption process. That is, if teachers are engaged in the decision to adopt the model, they will be more likely to approach implementation with a positive perspective.

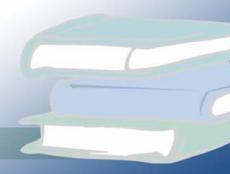
Drawing from both qualitative and quantitative data from a mixed-methods study of the implementation and impact of CSR, this paper will explore the dynamics of the adoption process, focusing on several questions:

- ♦ How prevalent are specific model adoption practices?
- When schools select and adopt CSR models, are these processes inclusive and legitimate?
- ♦ Do specific adoption strategies bode more favorably for model implementation?

In short, we will attempt to probe more deeply into the earliest phases of CSR and explore emergent relationships between the quality of the adoption process and implementation.

# **Literature Review and Conceptual Model**

The adoption process has potentially significant implications for the later success of a CSR model, as reflected by the research literature that addresses this topic. There is general consensus within the literature that (a) stakeholders should be informed about the model(s) their school is considering and should have a voice in the adoption process, *because* (b) such involvement generally fosters a greater stakeholder commitment to the model, *although* (c) stakeholders are rarely engaged in the adoption process, and participation generally lacks depth. A report by the Education Commission of the States (1999) puts it plainly: "Although it seems obvious, many administrators, policymakers and others



advocating reform fail to bring teachers to the table early on. . . . Without the active support of a majority of teachers, comprehensive reform is doomed" (p. 16).

Indeed, numerous studies have highlighted deficiencies of the model adoption process in most schools. Teachers in reforming schools generally lack time to become engaged in the adoption process and do not feel informed about the models (Berends & Bodilly, 1998; Stringfield & Ross, 1997). Ross (2001) noted that teachers and principals in Memphis, TN, often expressed the belief that the model adoption process was not entirely as flexible or democratic as the district had thought it would be: "Many conveyed the belief that the external models (especially a select few) were 'favored' by the central administration. . . . [They] reported that such models were often hastily selected by schools without a true understanding of their focus" (p. 7).

Datnow (2000) conducted a qualitative analysis of the adoption process in a small sample of schools, highlighting some of the dynamics of this process. First, she found distinct patterns with regard to the impetus for reform: In some cases, the district obliged schools to adopt a specific model, and in others, the district encouraged schools to adopt one of several approved models. In still other sites, the adoption of the model was initiated by school stakeholders themselves, with no intervention from the district. In schools in which the adoption process was largely driven by the principal, teachers played a more substantive role—although these reports are not unanimous. Moreover, Datnow reported that five of the seven schools with principal-led reform were still implementing their models. In schools in which the district played a major role, teachers were required to vote for the adoption of the model; despite this, "local buy-in was not as genuine as was hoped, despite the best intentions of district administrators." In some cases, it appeared that the voting process either lacked salience for teachers (some did not remember voting) or was mildly coercive. As Datnow explains,

In many cases, teachers stated that the reform adoption voting process was not genuine. Either teachers voted several times until the desired outcome was achieved, or they were strongly encouraged to vote for the reform the first time. . . . The vote gives the presumption of buy-in, and allows administrators to later point to the fact that staff chose to adopt the reform. (p. 367)

However, several studies go beyond the description of problems to the identification of specific adoption strategies that later support implementation. For example, Bodilly (1998) determined that "schools were likely to make more significant implementation progress within the two-year time frame we studied if they: Were well informed about the designs [and] had free choice among designs" (p. 56). These twin concepts of information and free choice emerge in other reports, albeit with alternate terminology. For example, writing of the Success for All model, Slavin and Madden (1999) note, "We have found that it is very difficult to work in schools in which the staff did not make an overwhelming, informed, and unfettered choice" (p. 8).

Drawing from the themes in this literature—including descriptions of perceived problems—we can suggest an "ideal type" adoption process. It appears that there are two main phases to the adoption process. The first phase is the *information-gathering phase*, during which stakeholders receive access to information on the models the school is considering. Schools' efforts to provide information might be cursory—for example, teachers might listen to short presentations about models during a single faculty meeting. In contrast, other schools engage in a more substantive approach, sending teachers to visit schools implementing models or inviting model representatives to respond directly to faculty questions.

In the "ideal" scenario, the information-gathering process should also be inclusive: All stakeholders should have the opportunity to learn about the proposed models.

The next phase of the adoption process is the *decision phase*, during which stakeholders share their opinions with regard to which model is ultimately adopted. The decision-making phase may take different formats—most frequently a vote or a consensus-building process. In either case, the decision phase should be inclusive: Most or all stakeholders should be afforded an opportunity to voice their opinions in an environment that does not stifle dissent. To best support implementation, the literature suggested that this process have legitimacy, or be "unfettered"; it should be more than a perfunctory approval of a forgone conclusion.

The current literature suggests that an adoption process that is inclusive, substantive, and legitimate is most likely to ensure that teachers have adequate understanding of the model and will generate teacher buy-in (favorable disposition toward the model). These characteristics, in turn, will bode more favorably for implementation. The general conceptual framework for our analyses is as follows:

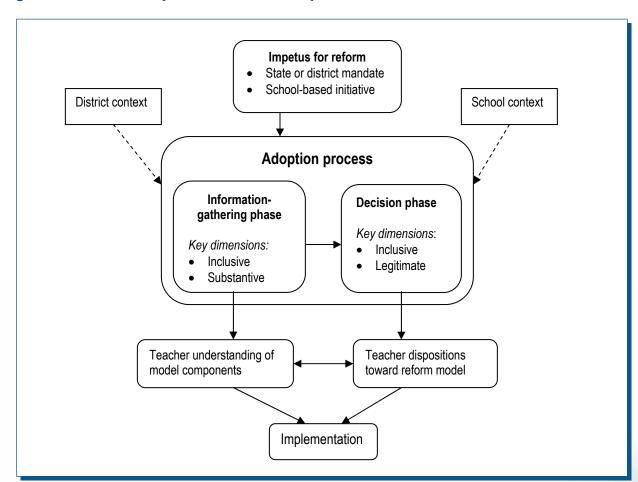


Figure 1. General Conceptual Model of the Adoption Process

# Methodology

This paper draws from a larger study: the National Longitudinal Evaluation of Comprehensive School Reform (NLECSR), a quasi-experimental, 5-year study funded through a grant from the U.S. Department of Education and conducted by the American Institutes for Research, the University of South Florida, and the National Opinion Research Center. The evaluation comprised two main components, quantitative and qualitative. The quantitative component consisted primarily of surveys of teachers, principals, and district administrators, in both schools with CSR models and matched comparison schools. The surveys of teachers were administered during the 2001–2002 and 2003–2004 school years, whereas the principal and district surveys were administered for 3 consecutive years, starting in 2001–2002. For the qualitative component the research team conducted site visits to 32 schools (including both schools with models and some matched comparison schools) in five districts. During each site visit, the team conducted teacher interviews, teacher focus groups, principal interviews, district administrator interviews, classroom observations, and interviews with community members. All schools were visited during the 2002–2003 school year, and selected schools were visited a second time during the 2003–2004 school year.

To explore the dynamics of the model adoption process, we drew from both survey data and qualitative site visit data. Both the principal and teacher surveys included items that were directly related to the adoption process, that is, whether the model was adopted through a vote among faculty, a consensus-building process, or neither. Other model-related items that were incorporated in our analyses were those that sought to determine whether the school adopted a model by choice or by mandate and whether the model was subsequently dropped. In addition, each survey contained several items of theoretical interest with regard to adoption, particularly those that pertain to the school-level context, such as principal leadership, the level of decision making, and the teacher professional community.

Our qualitative data too, lent themselves well to further analyses of the adoption process. To do so, we used two related analytic strategies. First, we developed a rubric that would facilitate the systematic analysis of school-level support for comprehensive school reform and related constructs. (We refer to this as the NLECSR Analytic Rubric.) The rubric contains four primary sections: constructs related to understanding CSR, perceptions of the CSR model, school-level CSR processes, and professional resources. Each section includes several specific constructs that were the subject of analysis—for example, *CSR processes* includes an analysis of the model adoption process and that of developer supports for implementation. Within each construct, we delineated five distinct levels and described each carefully. To complete a rubric for each school, the researcher would read all transcripts of teacher interviews, principal interviews, and teacher focus groups, identify text that would inform each of the constructs in the rubric, and code each respondent for every construct for which there were adequate data. Table 1 depicts an example of teacher interview data that informed our analysis of the adoption process:

**Table 1. Sample Excerpted From the NLECSR Analytic Rubric** 

Construct name	Description of construct	Definition of levels	Quote	Level
Adoption process  This construct reflects the degree to which stakeholders perceive the model adoption process to be inclusive, informative, thorough, and adequate to		4: The teacher or principal describes an adoption process that was inclusive and informative, and stakeholders had an opportunity to express their views.	Teacher 2: "During the workshops there were three or four models, different models, presented to the staff. And a case was being made for each model. I think some people even went out and checked on the other models"	3
	adequate to generate buy-in.	3: The teacher or principal describes a process that was generally inclusive, with some minor shortcomings (for example, perhaps greater efforts should have been made to include all stakeholders), but otherwise was informative. Interviewees express only very minor reservations about the process.	Teacher 1: "We came back one school year [and] we were told this is what we're going to do."	0
		2: The teacher or principal describes a somewhat imperfect process (perhaps including only some stakeholders, perhaps too short), but with some effort to acknowledge the importance of gaining buyin.		
	1: The teacher or principal describes a process dominated by a closed circle of individuals, with little feedback from other stakeholders.			
		<b>0:</b> The teacher or principal describes no stakeholder involvement.		

Another important construct we measured through the NLECSR Analytic Rubric was the degree to which teachers understood their school's model to be multidimensional. Most CSR models have several components, including provisions for instruction, curriculum, parent involvement, professional development, and governance, among others. Hence, the rubric included a construct we labeled *comprehensiveness*, for which we carefully identified interview data that provided evidence of stakeholder awareness of model components. For example, in some cases, teachers spoke only of the instructional component of a model and exhibited little awareness of other elements of the model; these teachers received low ratings for their awareness of comprehensiveness. In other cases, teachers spoke fluently of the governance structures, provisions for parent involvement, and other components; such teachers received a much higher rating for the comprehensiveness construct.

With all data coded, we were able to generate an aggregate score for each CSR school, both for individual constructs (such as model adoption) as well as a composite score for all constructs related to the CSR model. The composite score was calculated by first generating three average scores: ratings from (a)

teacher interviews, (b) teacher focus groups, and (c) principal, assistant principal, and reform coordinator interviews. Data from teacher interviews were only included if at least half of the interviews yielded data on a specific construct. Next, these three sets of scores were summed and averaged, and the resulting score was calculated as a percentage of the total possible score, so that each school score was expressed on a common scale of 0 to 1.

After completing a rubric for each CSR school, we then had a systematized way of exploring the relationships in our qualitative data—for example, determining whether schools with a "high scoring" adoption process also were those in which teachers exhibited high levels of model awareness during implementation. To ensure reliability, research staff discussed and "calibrated" scores across schools. For example, after completing rubrics for all schools with CSR models, we identified schools with similar or identical ratings and compared data for each, determining whether an identical rating was appropriate and adjusting accordingly. This intensive review process ensured that the ratings reflect, as accurately as possible, the range of implementation dynamics that occurred within the case study schools.

In addition to simply exploring these patterns and relationships in the qualitative data, we sought to probe deeper to better understand the nuances of the adoption process. For this we used a different qualitative tool—a school-level "template" that structured qualitative data around guiding questions for each construct. With regard to the adoption process, these guiding questions included: Who initiated the CSR model adoption process? Who participated in the model adoption process? How were stakeholders engaged in the model adoption process? For what reasons was the model adopted?

By systematically reviewing all qualitative data from each site visit—from not only teacher and principal interviews, but also parent focus groups, community focus groups, and school improvement plans—we were able to generate a more detailed picture of school-level dynamics. Together, our quantitative and qualitative analyses portrayed relationships and patterns at different levels, enabling a comprehensive review of the model adoption process.

# **How Prevalent Are Adoption Practices?**

How might adoption processes vary by context? As our conceptual model suggests, it is indeed plausible that context—either that at the school level itself, or of the district in which a school is situated—would shape the process through which a school "decides" to adopt a CSR model. For example, some districts might openly encourage schools to vote, while others may constrain the process. Other contextual variables, such as district or school size, may result in a greater likelihood that schools will engage in a voting process. In this section, we explore data from the principal survey, in which respondents were asked whether the school had voted for a particular model. We examine principal responses within districts, by specific district and school characteristics.

#### District Context

To determine the extent to which contextual variables appear to be related to model adoption processes, we will first examine survey data at the district level. Looking across the 21 districts in the NLECSR sample, we determined the percentage of schools in which the principal reported that the school adopted the model through a faculty vote (see Figure 2). Most noteworthy is the degree to which voting appears to have become institutionalized: 8 of the 21 NLECSR districts were at the 100% voting level, and 10 were

above 90%. The efforts of CSR model developers to ensure that school stakeholders approve the adoption of a model appear to have become firmly entrenched in most districts. However, we can perceive some minor district-level variation with regard to voting: in one district only 50% of the CSR schools voted to adopt their model, and in one third of the districts this figure is below 80%.

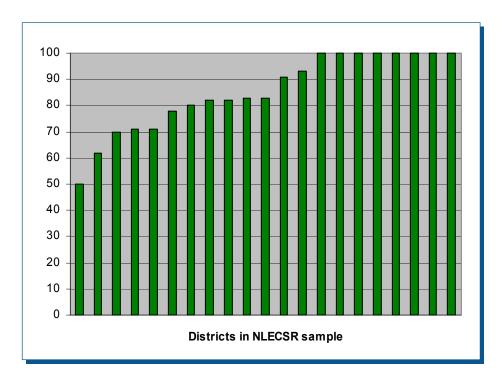
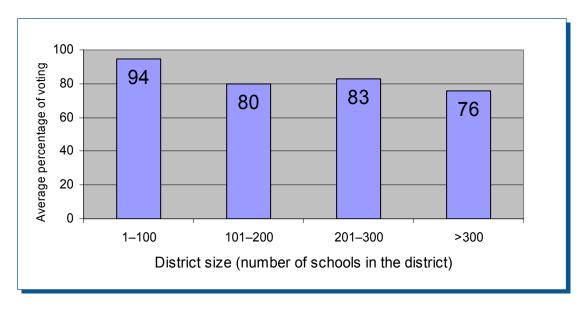


Figure 2. Percentage of Schools in Surveyed Districts That Voted for Model Adoption

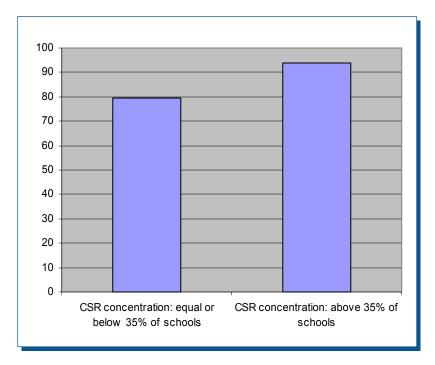
What might explain these (relatively small) differences between districts with regard to voting for a model? First, we looked at one of the most straightforward variables: district size. As we can see in Figure 3, district size is somewhat related to the voting process. In districts with fewer than 100 schools, 94% of the CSR schools reported having voted for the model that they subsequently implemented. In contrast, in districts with more than 300 schools, 76% of CSR schools reported voting. It is possible that in smaller districts, it is more likely that voting norms will pervade the districts, or that district-level efforts to support specific CSR activities are easy to monitor and enforce among fewer schools.

Figure 3. Percentage of Schools That Voted for the Adoption of a Model by District Size



Next, we examined the relationship between voting processes and the concentration of CSR schools within a district. We constructed a variable based on the proportion of schools in a district implementing a CSR model as reported by the district survey respondents. In relation to voting, it appears that there is a threshold at which schools are more likely to vote: In districts in which more than 35% of schools have a CSR model, 93.8% of such schools reported voting for their model. In districts in which less than 35% of schools have a model, the likelihood of voting is lower, at 79.6%. (See Figure 4.) Although this effect is not as pronounced as district size, it does appear that there is a weak relationship between CSR concentration and voting.

Figure 4. Percentage of Schools That Voted to Adopt Their Model, by Concentration of CSR Schools



Overall, it appears that a few district characteristics—size and CSR concentration—are weakly related to the likelihood that schools will vote for the adoption of a CSR model. However, the most relevant conclusion is that voting, as part of the process through which schools adopt a CSR model, has become a nearly de facto component of the lifecycle of CSR.

#### School Context

Turning next to the school level, we sought to determine whether there were any relationships between school contextual variables and the likelihood that a school's model adoption process included a faculty vote. Again, we examined the relationship between the principal's report of voting and school demographics. Interestingly, few school-level contextual variables appear to be systematically related to voting for a CSR model.

The one finding of potential interest relates to school size: Our survey data indicate that large schools are less likely than small schools to reach a high percentage in favor of adoption. The percentage of votes that favor adoption has negative correlation with school size: The correlation coefficient is –.128 and significant at the 0.05 level. This finding suggests that there are challenges associated with communicating important model-related information within schools that have large faculties. Referring to our conceptual model, we might conclude that the information-gathering process is hindered within large schools, which results in lower levels of favorable votes during the decision-making process.

Such analyses are only a first step, however; they only enable us to explore broad contextual relationships, with a focus on only one aspect of voting. Moreover, our survey questions only enable us to study a single segment of the process: whether a school voted for the CSR model. Our survey data do not enable us to explore the degree to which teachers were informed of the model choices, who was involved in the adoption processes, and whether the processes were perceived to be legitimate and open. To fully understand the range of activities in which schools engage as they select a model, we must turn to the qualitative data.

## **School-Level Adoption Activities**

To better understand the range of activities in which schools engage when selecting a model, we carefully reviewed all interview data from teachers, principals, and model coordinators. As we can see from Figure 5, there is indeed a large range within the "ratings" schools received for the aggregate quality of their adoption processes.

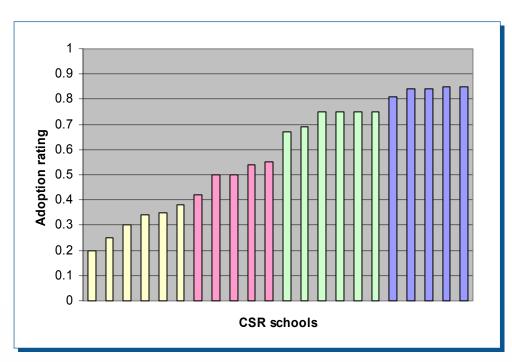


Figure 5. Adoption Ratings Within the NLECSR Sample

While calibrating all scores, it became apparent that schools fell into specific clusters, based on the activities that characterized their adoption processes. That is, specific practices seemed prevalent in schools that fell within a limited range of adoption ratings, and these practices lent themselves to natural clusters. The descriptions of these processes are as follows:

Closed Adoption (ratings of 0.0–0.40). Schools with the lowest ratings were those in which the adoption process was closed, with respect to several key constructs. In such schools, both the information-gathering and decision phases were closed; the former most often included a single

individual or restricted set of staff, and the latter was either a forgone conclusion or teachers had no say whatsoever. Often, there is a lingering sense of negativity with regard to the adoption process in such schools.

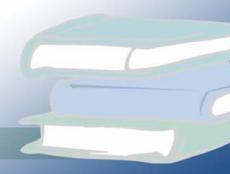
- ♦ **Directed Adoption** (rating of 0.41–0.60). In these schools, there was one organization or individual who strongly encouraged the school to adopt a model, most often the principal. Quite often a vote did occur, but it was conducted primarily because most models require a formal vote process and often lacked legitimacy.
- ♦ Guided Adoption (ratings of 0.61–0.80). In schools with *guided adoption*, the information-gathering phase was often quite open and inclusive, and the decision phase legitimate, but at least one key aspect was lacking. For example, a school may fall short with regard to the formats through which it provides information on the model choices: Instead of visiting schools and inviting model developers to visit, stakeholders may only review videos and text materials. In such schools, teachers have a generally positive recollection of the adoption process.
- ♦ Open Adoption (ratings of 0.81 or higher). In these schools, there was clearly a proactive engagement on the part of many staff members with regard to model adoption. The information-gathering phase was extensive, often characterized by teachers visiting schools with models, making presentations to their colleagues, actively questioning model developers, and debating a range of model choices. The decision process was legitimate, and teachers were allowed the opportunity for dissent. In short, all aspects of the process were "open," including participation, model consideration, and feedback.

The following profiles further illustrate the ways in which these patterns took form at the school level.

### Profile of Open Adoption (Rating of 0.81 or Higher)

Northway Elementary School selected a CSR model in the context of a district initiative that encouraged schools with at-risk students to adopt models. Despite this potentially negative impetus for reform, staff at Northway have no negative perceptions of the adoption process. With regard to the information-gathering phase, faculty at Northway asserted that they had sufficient opportunities to learn about their selected model (CSR Model F) in comparison to other models. School staff learned about the model by forming a designated committee that worked collaboratively with the school management team to consider different models and present information about the models to the staff. They researched at least seven different models that included CSR Model P, CSR Model A, CSR Model I, and CSR Model F. In addition, the district provided presentations on all the models. Finally, teachers reported receiving documentation on different models, reviewing these model data, and discussing them with their colleagues.

Formally, school staff at Northway selected CSR Model F through a vote. School-level staff voted on all models, and CSR Model F received more than 90% of the staff vote. Teachers perceived that they had authentic input in the decision process. Teachers in the focus group stated, "We had input at looking at the other models. . . . We went through them together, the administrators and teachers." Years later, the staff were able to articulate their reasons for having adopted CSR Model F. Strong opinions about the model were based on perceptions of fit to the school. Teachers believed specific aspects of the model fit the needs of the students. The reform facilitator concurred, noting that "CSR Model F really meshed with the teachers' beliefs."



In summary, despite actions taken by the district to narrow model selection choices for Northway, the school-level decision making for the model was inclusive of school staff. School committees and the district worked to generate information about various models for school staff. School staff had a positive tone toward the model at adoption time particularly because of perceptions of fit with existing teacher beliefs as well as children's needs.

### Profile of Closed Adoption (Rating of 0.0 to 0.40)

At Baxter School, the adoption process was strikingly different. Most teachers at Baxter were excluded from the information-gathering phase of the process, which was restricted to a closed group of teachers on the restructuring team. The few teachers on the restructuring team were able to research different models, as one explains: "Our principal gave us a list of programs—at the time I was on the restructuring team and we were allowed to go to demonstrations of other reform programs. . . . I was impressed with CSR Model I; I thought it would have worked for us here. . . . " But teachers who were not on the restructuring team were less engaged, as illustrated by the following quotes:

- "I was at the school when the model was adopted, but I was not involved in the selection process." ... I had no input."
- "I think I had heard a little about the program . . . or was it CSR Model F?"
- "We came back one school year [and] we were told this is what we're going to do."

Most teachers were ambiguous about whether they were given the opportunity to vote for the model; the only interviewed teacher who recalled voting was the member of the restructuring team. However, she suggests that teachers had lingering resentment with regard to the model, and later asserted, "but I didn't vote!" Other commentary from teachers suggests that they perceived that CSR was simply a mandatory process in which they had no say. Even if we accept some accounts that there was a vote, clearly it lacked validity to many of the faculty at Baxter.

In sum, the adoption process entirely lacked transparency—few teachers received any information about models under consideration, and fewer still perceived they had a voice in the decision. Not surprisingly, teachers at Baxter retain some bitterness about the model.

# Implications for Implementation

As schools embark on the process of comprehensive reform, some initiate their efforts in a way that engages staff in a collaborative decision, while others effectively mandate a program to unsuspecting faculty. Within the lifecycle of CSR, what are the longer-term implications of such debuts?

# Survey Data

To explore the relationship between the adoption process and subsequent implementation processes, we first turn to the survey data. Here, we examine the relationship between whether a school voted for a model and several indicators of school culture. Because voting is indicative of an inclination to include teachers in a decision-making process (if indeed the voting process is legitimate and unfettered), we would expect schools that voted to also be those with positive indicators of shared decision making and common goals. Indeed, the principal survey scale related to "school-level involvement in decision making" was significantly related to whether a school had voted for its CSR model.

Table 2. Voting Predicts Higher School-Level Involvement in Decision Making (Principal Survey Scale)

Solution for fixed effects on school-level involvement in decision making							
Effect	t value	Pr >   <i>t</i>					
Intercept	2.7294	0.1458	20	18.72	<.0001		
Voted	0.1659	0.07298	237	2.27	0.0239		
PCT_FRLUNCH	0.002416	0.001529	237	1.58	0.1154		

In addition, we found a significant relationship between a school's voting history and the teacher survey scale related to "clear and shared goals" (see Table 3). This is a relationship that is consistent with the "ideal type" model adoption process presented in our conceptual framework. If faculty members come together during the adoption phase, this is likely to foster (or perpetuate) a climate in which teachers are united behind a common purpose. Indeed, such was the case in the CSR schools surveyed by NLECSR.

Table 3. Voting Predicts Degree to Which Teachers Have Clear and Shared Goals

Solution for fixed effects						
Effect	Estimate	Standard error	DF	t value	Pr >   <i>t</i>	
Intercept	3.2497	0.09575	20	33.94	<.0001	
Voted	0.1489	0.02722	1739	5.47	<.0001	
PCT_FRLUNCH	-0.00211	0.001078	1739	-1.96	0.0499	

Next, we found a significant relationship with two scales that are more closely related to implementation. The first of these (Table 4) was related to teachers' perceptions of the usefulness of information provided to them by model developers. This is a scale derived from several items on the teacher survey that probe the efficacy of specific developer supports, such as a needs assessment, curricular materials, onsite assistance, or conferences. Hence, in cases in which they voted for a model, teachers have more positive perceptions of developer activities. Perhaps teacher involvement in the voting process predisposes them to a favorable impression of the model, or active engagement during the adoption process results in the selection of a model that best meets the needs of a school. In either event, positive perceptions of the usefulness of developer-provided information bode auspiciously for implementation.

Table 4. Voting Predicts Higher Reported Usefulness of Developer-Provided Information

Solution for fixed effects						
Effect	Estimate	Standard error	DF	t value	Pr >   <i>t</i>	
Intercept	2.4496	0.1352	20	18.12	<.0001	
Voted	0.2272	0.03962	1623	5.74	<.0001	
PCT_FRLUNCH	0.000584	0.001551	1623	0.38	0.7065	

Finally, survey data suggest a relationship between voting and the degree to which teachers report that professional development activities have changed their instructional practices. Changing teachers' pedagogy is one of the most challenging aspects of any CSR model; hence, relationships with this variable are of particular interest. As Table 5 depicts, teachers in schools in which the model was adopted through a vote are more likely to report changing their instructional practice.

**Table 5. Voting Predicts Instructional Change Associated With Professional Development** 

Solution for fixed effects						
Effect	Estimate	Standard error	DF	t value	Pr >   <i>t</i>	
Intercept	2.3810	0.08572	20	27.77	<.0001	
Voted	0.1433	0.03419	1680	4.19	<.0001	
PCT_FRLUNCH	0.003184	0.000987	1680	3.23	0.0013	

Hence, the NLECSR surveys revealed several interesting statistically significant relationships between voting for a model and scales that measure constructs favorable to model implementation. Schools that adopted models through a vote subsequently had greater school-level activity in decision making, a greater sense of clear and shared goals, higher levels of perceived usefulness of developer supports, and instructional change in response to professional development.

#### Qualitative Data

To further explore the relationship between the adoption process and constructs related to implementation, we turned next to the qualitative data. The NLECSR Analytic Rubric captured several constructs closely related to the implementation of the model. Most notable among these is the comprehensiveness dimension. This we conceptualize as the degree to which stakeholders understand that the CSR model is intended to be comprehensive or multidimensional—that is, encompassing multiple aspects of the school environment, including instruction, governance, professional development, and parent involvement, among others. When respondents were aware of several model components—and articulated this in the context of an interview—they received higher ratings for comprehensiveness. Clearly, knowledge and awareness of model components is an important precursor to full implementation of the model.

Figure 6 depicts the relationship between the quality of the adoption process and stakeholder understanding of comprehensiveness, both as measured by the NLECSR Analytic Rubric. The foremost purpose of the Analytic Rubric was to identify clusters and the prevalence of specific practices. However, rubric results may also be used to cautiously explore emergent trends, with the primary objective of identifying relatioships that merit further qualitative study. As the trendline indicates, there does appear to be a weak relationship between the adoption process and a comprehensive understanding of the model. That is, as the quality of the adoption process increases, so does stakeholder awareness of key components of the model.

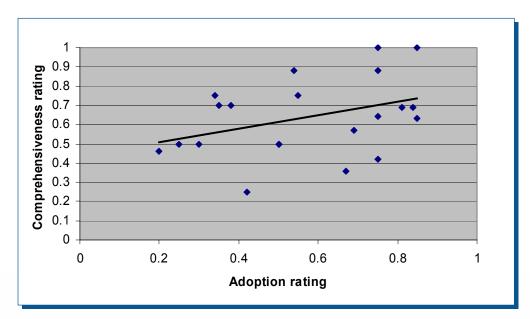


Figure 6. Adoption and Comprehensiveness Ratings, Scatterplot

As our conceptual model suggests, if teachers learn about a reform approach during the adoption process, they are in a stronger position to build on this knowledge during the implementation process. However (and perhaps more interestingly), there are examples from our case study data in which a school received a relatively high rating for the quality of the adoption process, but received a low comprehensiveness rating—or the converse, schools in which stakeholders exhibited a high level of understanding of the model, despite an adoption process that was lacking. To highlight these variations, Figure 7 depicts the relationship between adoption and comprehensiveness ratings in a slightly different manner.

1 0.9 8.0 Rubric rating scale 0.7 Adoption rating 0.6 ■ Comprehensiveness 0.5 0.4 0.3 0.2 0.1

Figure 7. Adoption and Comprehensiveness Ratings

Here the relationships among the ratings emerge more strikingly. Several schools have predictably close associations between adoption and comprehensiveness. Others are relatively low or relatively high on both dimensions, and hence are of lesser interest. Interestingly, many of the schools with the lowest ratings for adoption have much higher ratings for comprehensiveness, and several schools with "open" adoption processes nonetheless exhibit lower levels of understanding of the model. To better understand the way in which school-level dynamics generate these disparate interactions, we will explore these two sets of contrasting scores: schools with low adoption/high comprehensiveness ratings and schools with high adoption/low comprehensiveness ratings.

#### **Contrast A: Low Adoption/High Comprehensiveness**

Five schools have notable disparities in their adoption and comprehensiveness ratings—their comprehensiveness ratings are above 0.70, but the adoption rating is at least 20 points lower:

- Centerville Elementary (adoption: 0.34; comprehensiveness 0.75)
- Shoreland Elementary (adoption: 0.35; comprehensiveness: 0.70)
- Iberville Elementary (adoption: 0.38; comprehensiveness: 0.70)
- Chamberland Elementary (adoption: 0.54; comprehensiveness: 0.88)
- Roseton Elementary (adoption: 0.55; comprehensiveness: 0.75)

Looking across these schools, it appears that these schools benefited from either a strong, visionary principal or a relatively cohesive professional community. In both Chamberland and Roseton Elementary Schools, teachers described their principals in very positive terms, both emphasizing the principals' determination. In Chamberland, for example, the teachers explained,

Recently our principal was identified as a model principal. . . . I think all of the things that we've been able to accomplish have been with the help or the leadership of [the principal], because she has vision and she does not sit back and wait for things to happen. If she hears about anything that's coming down the pike, then she will dispatch people to learn as much as they can about it and bring it back here so that we are always on the cutting edge.

Likewise, Roseton teachers explained, "There are certain things our principal is very passionate about. She's always looking out for new ideas and the ones she thinks are going to come to fruition she pushes." In these cases, the principals drove the adoption process because they thought the models would benefit the schools and successfully converted teachers to this vision, resulting in high comprehensiveness scores.

In two of the other schools, the professional community facilitated faculty awareness and understanding of the models. Teachers at Iberville—one of the schools with a notably low adoption rating—described a cohesive community: "Lesson plans are presented not as an individual but as a group, and that keeps in mind that we are working together for the benefit of all the children and it's not just one single pioneer, but all of us are pioneers together in this journey of education." It appears that this sense of working together translated into high level of model awareness.

At Centerville Elementary, the qualitative data resulted in an overall adoption rating of 0.34 (one of the lowest) but stakeholders nonetheless exhibited a relatively high level of understanding of the model (0.75). This is a school in which the principal clearly drove the adoption process, explaining, "CSR Model C was really right in the line of what I was doing anyway. . . . I wrote the grant." Teachers were less engaged in the principal's grant-writing process, recalling vaguely, "The model had already been selected when it was brought to the faculty. . . . So, that's how we found out about it." However, this school eventually became a model for others that were considering adopting CSR Model C, hosting visitors from other schools:

They were visiting our school to see what we were doing and how we were doing it. And everybody was on target. It was just perfect. And the fact that we were able to connect CSR Model C with our daily activities made it all that more worthwhile. Because a lot of kids that probably would have been overlooked in some activities, they saw everybody else participating so they did too. . . . [The students] were really, really involved. You could really see the ownership of the children.

In this school, however, it does not appear that the principal drove the success of the model, but rather it was the way in which teachers worked together. As one explained, "What I love about being here, the teachers work together. . . . If we get lemons, we make lemonade!" Apparently, they did just that with regard to the CSR adoption process. This example suggests that an informative and inclusive adoption process is not a necessary precursor to effective implementation.

In the final school in this category, Shoreland Elementary, the explanatory factor is less clear: The school is one that faces many challenges, including a transient community and a mildly acrimonious relationship between the principal and (at least some of) the faculty. The most positive element in the school appears



to be a shared sense of caring for the students. So here, too, it seems that the professional community most likely overcame the potential negative side-effects of a closed adoption process.

#### **Contrast B: High Adoption/Low Comprehensiveness**

There were three schools with adoption ratings higher than 0.65 and comprehensiveness ratings that were at least 12 points lower. Overall, there are fewer schools with extreme differences between high adoption process and low comprehensiveness ratings. The three schools in this category are:

- ♦ Traceland Elementary (adoption: 0.67; comprehensiveness: 0.42)
- Canton Elementary (adoption: 0.69; comprehensiveness: 0.57)
- Greenway Elementary (adoption: 0.75; comprehensiveness: 0.42)

Traceland Elementary offers an interesting example of this second set of contrasting scores. This school experienced a relatively inclusive adoption process, resulting in a rating of 0.67. However, teachers exhibited a relatively low level of understanding of the model, and the comprehensiveness score was only 0.42. In this case, a strong principal served to ensure that the teachers were engaged in the adoption process and understood the model from the start. As teachers recalled.

We had a very strong principal who was very interested in improving test scores. She was very interested in the research that was going on. She was a great networker and so she learned of [the model] and, you know, the philosophy behind it. . . . So she was kind of ahead of her time. She was always three steps ahead of what was going on, so that's how she got us into it. . . . The staff really agreed to do the work.

Another teacher said. "It had to be by faculty vote, so if we did not agree to it, they would not accept it. ... The principal explained it quite well, and we discussed it quite a bit and then we agreed to it. ... We saw a film; people came from the state and spoke to us." However, after a few years of implementation, this principal left the school, to be replaced by an interim principal for 1 year. As a result, the components of the model faded quickly—and with some regret expressed by teachers who knew the former dynamic principal. However, once this principal left, the faculty could not sustain the same levels of comprehensiveness, particularly as new staff joined their ranks. As this case illustrates, the benefits generated by an effective adoption process and strong leader can dissipate quickly. However, had the principal not left, it is likely that this school would have retained a strong relationship between the quality of the adoption process and faculty awareness of the model.

The data for Greenway Elementary offer several clues about barriers to implementation and the school's low rating for comprehensiveness. Teachers expressed little enthusiasm for collaborative practice (said one, "We haven't met that often collaboratively, but actually I prefer it that way"), contempt for district policies, and nothing more than lukewarm assessments of the principal. What is surprising, in fact, is that the adoption process was relatively inclusive and informative: teachers reported visiting other schools, studying models, deciding which model best suited their school, and voting for the model of their choice. However, this case suggests that even an adoption process designed to foster teacher buy-in may not be adequate to overcome school-level challenges to reform.

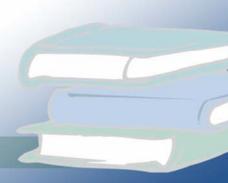
To summarize, the qualitative data suggest that for some schools, there is a predictable relationship between the quality of the adoption process and the degree to which stakeholders understand the core components of the model—a key precursor to implementation. However, many schools in the case study sample deviate from this trend. For some schools a "closed" adoption process does not preclude eventual teacher buy-in; either a persuasive principal or a cohesive professional community can overcome this hypothetical barrier. In contrast, an "open" adoption process does not appear adequate to overcome organizational challenges present within a school.

#### Conclusion

In the past, CSR researchers have suggested that the quality of the adoption process is a critical precursor to gaining teacher buy-in, which in turn is an important indicator of the ultimate success of the model. As such, the "birth" of a CSR model has potentially important implications for its success later in life. However, our data suggest a more nuanced view: Adoption may be an important but not necessarily critical element in the implementation process. In some cases, strong school-level supports are of greater consequence than the quality of the adoption process.

First, our survey data reveal that CSR schools that engaged in a voting process are more likely to exhibit practices that bode favorably for implementation. Also, survey data suggest that schools in certain types of districts—smaller districts, and those with greater concentrations of CSR schools—are somewhat more likely to vote for the model they subsequently implement. More importantly, however, it appears that the voting process has become an institutionalized component of the model selection process—in nearly half of the NLECSR districts, the voting level is above 90%. But as our qualitative data suggest, there is great variation still within the act of voting.

Indeed, our qualitative data depict a striking range of activities in which schools engage as they select a CSR model. Some restrict the process to a small group and diffuse little information about models. Others engage the majority of the faculty in the active pursuit of the model that best addresses school needs. In some cases, the quality of the adoption process is associated with subsequent indicators of implementation, most notably the level of teacher understanding of the key components of the model. However, we also found that strong principals and professional communities can overcome potentially negative effects associated with a "closed" adoption process, and positive effects of an "open" adoption process may dissipate quickly. On the whole, the way in which models are adopted within schools may well affect the later health of the model, but the subsequent environment can counterbalance these earliest dispositions.



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