

Systemic Change for School Improvement

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Despite the nationwide emphasis on school improvement, the complexities of accomplishing desired systemic changes have been given short shrift in policy, research, training, and practice. This article focuses on the problem of expanding school improvement planning to better address *how* schools and districts intend to accomplish designated changes. Specifically, we frame and outline some basic considerations related to systemic change, and, to encourage a greater policy discussion of the complexities of implementing major school improvements on a large scale, we propose a set of policy actions.

Major school improvements require substantive systemic change, and if the intent is to leave no child behind, fundamental and essential improvements must occur in all schools. However, effective improvement on a large scale cannot even be approximated as long as policymakers, education leaders, and researchers continue to treat systemic change as an afterthought.

Based on analyses of school improvement planning guides, there is a widespread failure to address how desired improvements will be accomplished (Center for Mental Health in Schools, 2005a, 2005b). That is, there is little evidence of sophisticated strategic planning for how schools and districts intend to move from where they are to where they want to go. Furthermore, we find in our work across the country that most personnel who are expected to act as change agents in districts and schools have relatively little specific training in facilitating major systemic changes. Moreover, a survey of the relevant literature suggests that the nation's research agenda

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does not include major initiatives to delineate and test models for widespread replication of education reforms. Little attention has been paid to the complexities of large-scale diffusion. Leadership training for policymakers and education administrators has given short shrift to the topic of scale-up processes and problems (Duffy, 2005; Elmore, 2003, 2004; Fullan, 2005; Glennan, Bodilly, Galegher, & Kerr, 2004; Hargreaves & Fink, 2000; Thomas, 2002).

School improvement obviously needs to begin with a clear framework and map for what changes are to be made. It should be equally obvious that there must be a clear framework and map for how to get from "here to there," especially when the improvements require significant systemic change. And, in both cases, there is a need for a strong science base, leadership, and adequate resources for capacity building. With all this in mind, this article focuses on expanding school improvement planning to better address *how* schools and districts intend to accomplish designated changes. Based on our work facilitating systemic changes and scale-up to enhance how schools address barriers to learning and our analysis of the strengths and weakness of the available science base, this article frames and outlines some basic considerations related to systemic change. To encourage a greater policy discussion of the complexities of implementing major school improvements on a large scale, a set of policy actions are proposed.

SCHOOL IMPROVEMENT, PROJECTS, AND SYSTEMIC CHANGE

Well-conceived, well-designed, and well-implemented prototype innovations are essential to school improvement. Prototypes for new initiatives usually are developed and initially implemented as a pilot demonstration at one or more schools. This is particularly the case for new initiatives that are specially funded projects.

For those involved in projects or piloting new school programs, a common tendency is to think about their work as a time limited demonstration. And, other school stakeholders also tend to perceive the work as temporary (e.g., "It will end when the grant runs out" or "I've seen so many reforms come and go; this too shall pass"). This mind-set leads to the view that new activities will be fleeting, and it contributes to fragmented approaches and the marginalization of initiatives (Adelman, 1995; Adelman & Taylor, 1997a, 1997b, 1997c, 2003). It also works against the type of systemic changes needed to sustain and expand major school improvements.

The history of schools is strewn with valuable innovations that were not sustained, never mind replicated. Naturally, financial considerations play a role in failures to sustain and replicate, but a widespread “project mentality” also is culpable.

Efforts to make substantial and substantive school improvements require much more than implementing a few demonstrations. Improved approaches are only as good as a school district’s ability to develop and institutionalize them equitably in all its schools. This process often is called diffusion, replication, roll out, or scale-up. The frequent failure to sustain innovations and take them to scale in school districts has increased interest in understanding systemic change as a central concern in school improvement.

At this point, we should clarify use of the term *systemic change* in the context of this article. Our focus is on district and school organization and operations and the networks that shape decision making about fundamental changes and subsequent implementation. From this perspective, systemic change involves modifications that amount to a cultural shift in institutionalized values (i.e., reculturalization). For interventionists, the problem is that the greater the distance and dissonance between the current culture of schools and intended school improvements, the more difficult it is to successfully accomplish major systemic changes.

Our interest in systemic change has evolved over many years of implementing demonstrations and working to institutionalize and diffuse them on a large scale (Adelman & Taylor, 1997c, 2003, 2006a, 2006b; Taylor, Nelson, & Adelman, 1999). By now, we are fully convinced that advancing the field requires escaping “project mentality” (sometimes referred to as “projectitis”) and becoming sophisticated about facilitating systemic change. Fullan (2005) stressed that what is needed is leadership that “motivates people to take on the complexities and anxieties of difficult change” (p. 104). We would add that such leadership also must develop a refined understanding of how to facilitate systemic change.

LINKING LOGIC MODELS FOR SCHOOL IMPROVEMENT

Figure 1 suggests how major elements involved in designing school improvements are logically connected to considerations about systemic change. That is, the same elements can be used to frame key intervention concerns related to school improvement and systemic change, and each is intimately linked to the other. The elements are conceived as encompassing the (a) vision, aims, and underlying rationale for what follows; (b) re-

Key considerations with respect to both (a) desired school improvements and (b) "getting from here to there" (e.g., systemic changes):

- >What is the vision, long-term aims, and underlying rationale?
- >What are the existing resources that might be (re)deployed and woven together to make good progress toward the vision?
- >What general functions, major tasks, activities, and phases need to be implemented?
- >What infrastructure and strategies are needed to carry out the functions, tasks, and activities?
- >What short-term indicators will be used as process benchmarks, what intermediate outcomes will indicate progress toward long-range aims, and how will negative outcomes be identified?

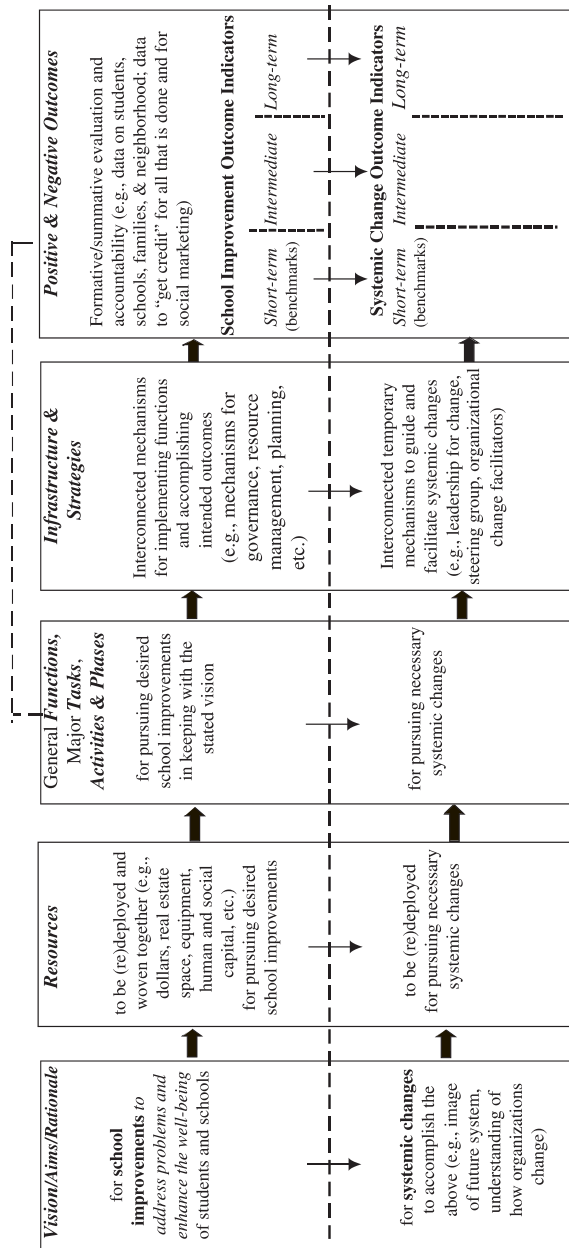


FIGURE 1 Linking logic models for designing school improvement and systemic change.

sources needed to do the work; (c) general functions, major tasks, activities, and phases that must be pursued; (d) infrastructure and strategies needed to carry out the functions, tasks, and activities; and (e) positive and negative results that emerge.

Strategic planning for school improvement should account for each of these elements, first with respect to a school's prototype for ensuring that all students have an equal opportunity to succeed in school and then with respect to how the school will accomplish essential changes. At the district level, the need is for a strategic plan that clarifies how the district will facilitate replication and scale-up of prototype practices. Each element, as it relates to systemic change, is highlighted briefly on the following pages.

Vision, Aims, and Rationale

Intentional interventions are rationally based (Adelman & Taylor, 1994). Vision statements hint at the rationale by conveying a set of ideals that are meant to lay the foundation for what follows. The rationale underlying any general vision statement is much more extensive. It is an outline that shapes the nature of intervention aims and procedures. It consists of views derived from philosophical (including ethical), theoretical, empirical, and legal sources. It incorporates an understanding of institutional mission and the policies and practices related to implementing and being accountable for desired improvements. Those concerned with understanding school improvement and systemic change as practiced must analyze the rationale underlying such activity, even though it may not be explicitly stated.

Although rationales guide interventionists' thoughts and actions, there is little evidence that they are systematically formulated and explicitly stated in developing school improvement plans. Even when not explicitly stated, however, underlying rationales have major ramifications for outcomes because they both guide and limit the nature of subsequent activity. As Brickman and his colleagues (1982) suggested, "Each set of assumptions has characteristic consequences for ... competence, status, and well-being ... [and] the wrong choice ... will undermine effective [outcomes]" (p. 368).

Of course, not all intervention rationales are equal. Some reflect a higher level of scholarly sophistication; some cover a broader range of relevant considerations; some have greater philosophical, theoretical, and empirical consistency. An intervention rationale's sophistication, breadth, and consistency are not the only important considerations. Systematic biases that arise from dominating models also are of concern. For instance, prevailing views of intervention for emotional, behavioral, and learning prob-

lems tend to (a) attribute cause to factors within the individual, and (b) focus intervention on changing the individual. This shapes how problems are described and labeled and plays down the causal role of environmental factors, such as social policies, and the characteristics of community, home, work, and school settings. It also underemphasizes environmental factors as a primary focus in correcting the problem.

Sophistication, breadth, consistency, bias—all must be considered and can be judged appropriately only if an underlying rationale is explicitly stated. Generally speaking, all efforts to understand, improve, and diffuse successful intervention activity are hampered by the absence of explicitly stated underlying rationales. As Rossi and his colleagues (1979) cautioned,

if the parties involved in program development and implementation fail (or refuse) to apply themselves to unraveling and specifying the assumptions and principles underlying the program, there is no basis for understanding what they are doing, why they are doing it, or for judging whether or not they are doing what they intend to do. (p. 19)

Resources

Operationalizing and implementing a vision for systemic change requires first and foremost a focus on ensuring adequate resources (e.g., dollars, real estate space, equipment, human and social capital, etc.). Pursuing major systemic changes in an era of sparse resources generally means redeploying and weaving together some of the system's available resources to underwrite the change process. If enough resources cannot be devoted to essential change processes, it is likely that substantive school improvement will not be achieved.

Of particular importance in identifying resources for systemic change is a "big picture" awareness of prevailing and pending policies, institutional priorities, and allocation of resources. Such understanding provides an essential foundation for formulating sound recommendations about how resources might be redeployed to underwrite desired systemic changes.

Resources that might be redeployed include those expended for nonproductive programs or ones that are addressing low priority needs. In addition, federal law (e.g., provisions in the No Child Left Behind Act of 2001) allows districts to redeploy some federal dollars for systemic improvements (e.g., changes that enhance how student supports are coalesced). Moreover, increasing concern for sustainability and scale-up makes it feasible to use facets of some project funding from government agencies and foundations to pursue systemic changes.

Functions, Tasks, Activities, and Phases

Given that an initiative has been designed with the intent of sustaining and replicating it throughout a school district, the general functions, major tasks, activities, and phases related to systemic change are determined by what is required to effectively plan and implement a sustainable initiative and take it to scale. This section highlights key facets related to the four phases of change involved in prototype implementation and eventual scale-up: creating readiness, initial implementation, institutionalization, and ongoing evaluation. Each phase warrants extensive discussion, but for our purposes here, it will suffice to highlight a few matters (readers can refer to Adelman & Taylor, 2003, for a more extensive discussion of the phases).

Nature and scope of focus. School improvement may encompass introducing one or more interventions, developing a demonstration at a specific site, or replicating a prototype on a large scale. The nature and scope of focus raises such questions as:

- What specific functions will be implemented and sustained?
- Will one or more sites/organizations be involved?
- Is the intent to make systemwide changes?

The answers to these questions set the boundaries for all subsequent efforts to sustain an initiative. For example, the broader the scope, the higher the costs; the narrower the scope, the less the importance to a district's overall mission and policy making. Both high costs and low valuing can work against sustainability.

Phases of the change process. Whether the focus is on establishing a prototype at one site or replicating it at many, the systemic changes can be conceived in terms of four overlapping phases: (a) *creating readiness*—increasing a climate/culture for change through enhancing the motivation and capability of a critical mass of stakeholders; (b) *initial implementation*—carrying out change in stages using a well-designed infrastructure to provide guidance and support; (c) *institutionalization*—ensuring there is an infrastructure to maintain and enhance productive changes; and (4) *ongoing evolution and creative renewal*—using mechanisms to improve quality and provide continuing support in ways that enable stakeholders to become a community of learners who creatively pursue renewal.

Sustainability and scale-up processes must address each of the major phases of systemic change as outlined. Figure 2 highlights a set of parallel

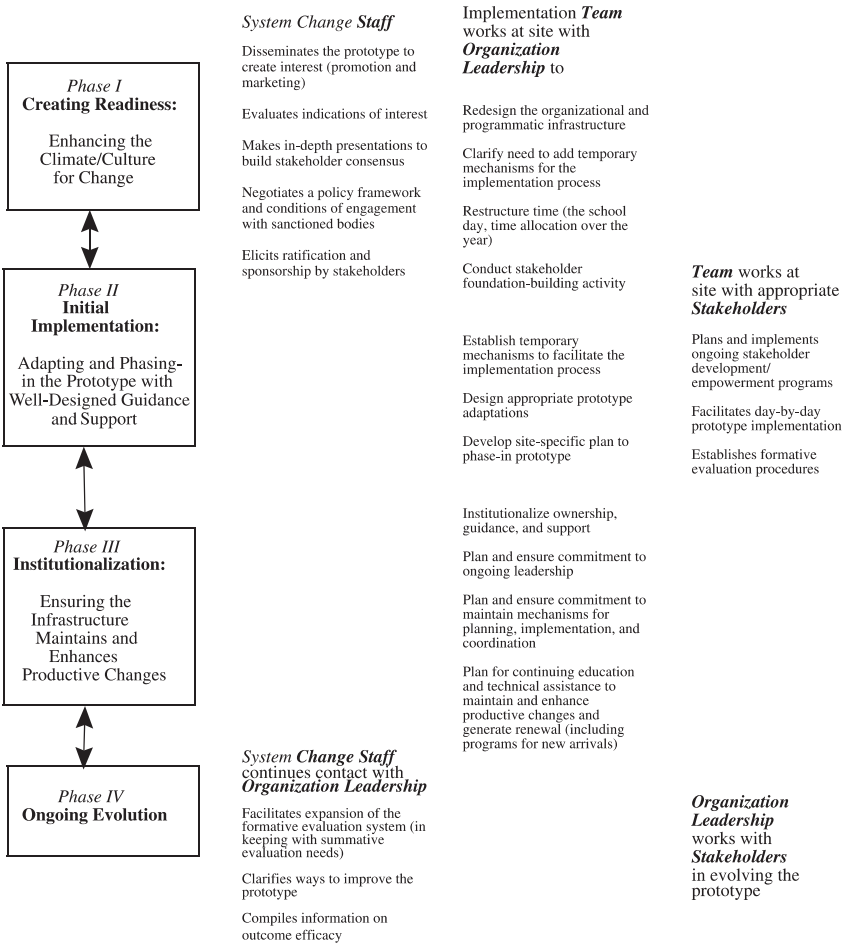


FIGURE 2 Prototype implementation and scale-up: Phases and parallel and linked tasks. Updated from "Toward a Scale-Up Model for Replicating New Approaches to Schooling," by H. S. Adelman and L. Taylor, *Journal of Educational & Psychological Consultation*, 8, 197–230. Copyright 1997 by Lawrence Erlbaum Associates, Inc.

and linked tasks related to each of the four phases. Again, the intended nature and scope of focus shapes the costs and the degree of importance assigned by policymakers with respect to ensuring that effective systemic changes are designed, implemented, sustained, and taken to scale.

Key facets. Whatever the nature and scope of the work, the various facets require careful planning based on sound intervention fundamentals.

Key facets include social marketing; articulation of a clear, shared vision for the work; ensuring there is a major policy commitment from all participating partners; negotiating partnership agreements; designating leadership; enhancing/developing an infrastructure based on a clear articulation of essential functions (e.g., mechanisms for governance and priority setting, steering, operations, resource mapping and coordination; strong facilitation related to all mechanisms); redeploying resources and establishing new ones; building capacity (especially personnel development and strategies for addressing personnel and other stakeholder mobility); and establishing standards, evaluation processes, and accountability procedures (Adelman & Taylor, 2003).

Creating readiness for systemic change. Common deficiencies associated with systemic change interventions are failures to address major aspects of the considerations outlined in Figure 2. Perhaps the most flagrant failures are not giving sufficient attention and time to strategies for (a) creating readiness among a critical mass of stakeholders, especially principals and teachers; and (b) accommodating leadership and staff changes.

Any move toward substantive systemic change should begin with activity designed to create readiness by enhancing a climate/culture for change. Organizational researchers in schools, corporations, and community agencies have clarified factors related to creating an effective climate for institutional change (e.g., Argyris, 1993; Fullan & Stiegelbauer, 1991; Replication and Program Services, 1993; Sarason, 1996). In reviewing this literature, we have extracted the following points as most relevant to enhancing readiness for change:

- A high level of policy commitment that is translated into appropriate resources, including leadership, space, budget, and time.
- Incentives for change, such as intrinsically valued outcomes, expectations for success, recognition, and rewards.
- Procedural options from which those expected to implement change can select those they see as workable.
- A willingness to establish mechanisms and processes that facilitate change efforts, such as a governance mechanism that adopts ways to improve organizational health use of change agents who are perceived as pragmatic—maintaining ideals while embracing practical solutions.
- Accomplishing change in stages and with realistic time lines.
- Providing progress feedback.
- Institutionalizing support mechanisms to maintain and evolve changes and to generate periodic renewal.

An understanding of concepts espoused by community psychologists such as empowering settings and enhancing a sense of community also is useful. There is a growing body of work suggesting that the success of a variety of initiatives depends on interventions that can empower stakeholders and enhance their sense of community (Beeker, Guenther-Grey, & Raj, 1998; Trickett, 2002). However, the proper design of such interventions requires understanding that empowerment is a multifaceted concept. In discussing power, theoreticians distinguish "power over" from "power to" and "power from." *Power over* involves explicit or implicit dominance over others and events; *power to* is seen as increased opportunities to act; *power from* implies ability to resist the power of others (Riger, 1993). Enhancing a sense of community involves ongoing attention to daily experiences. With respect to sustaining initiatives, stakeholders must experience initiative in ways that make them feel they are valued members who are contributing to a collective identity, destiny, and vision. Their work together must be facilitated in ways that enhance feelings of competence, self-determination, and connectedness with and commitment to each other (Deci & Ryan, 1985). As Tom Vander Ark (2002), executive director of education for the Bill and Melinda Gates Foundation, wisely notes, "Effective practices typically evolve over a long period in high-functioning, fully engaged systems" (p. 323).

Overlapping the efforts to create readiness are processes to develop an organizational structure for start-up and phase-in. This involves establishing mechanisms and procedures to guide reforms, such as a steering group and leadership training, formulation of specific start-up and phase-in plans, and so forth.

Systemic Change Infrastructure and Strategies

Implementation and scaling-up of major school improvement efforts require *infrastructure mechanisms* to facilitate changes (e.g., administrative leadership, organizational facilitators, change teams). With respect to a specific innovation, this infrastructure and related change strategies are seen as temporary, and so the resources allocated can be redeployed once the innovation is scaled-up.

Infrastructure. In general, existing infrastructure mechanisms must be modified in ways that guarantee new policy directions are translated into appropriate daily operations. Well-designed mechanisms ensure local ownership, a critical mass of committed stakeholders, processes that overcome barriers to stakeholders effectively working together, and strategies

that mobilize and maintain proactive effort so that changes are implemented and there is renewal over time.

It is rare to find situations where a well-designed systemic change infrastructure is in place. More characteristically, ad hoc mechanisms have been set in motion with personnel who have too little training and without adequate formative evaluation. It is common to find structures (e.g., teams, collaboratives) operating without clear understanding of functions and major tasks that must be accomplished. This, of course, defies the basic organizational principle that structure should follow function.

Effective and linked administrative leadership *at every level* is key to the success of any systemic change initiative in schools. Everyone needs to be aware of who is leading and is accountable for the development of the planned changes. It is imperative that such leaders be specifically trained to guide systemic change. They must work together effectively, and they must be sitting at key decision-making tables when budget and other fundamental decisions are discussed.

As highlighted in Figures 1 and 2, the general functions and major tasks related to effective sustainability and large-scale replication require dedicated change agent mechanisms that are fully integrated into the infrastructure for school improvement at each school site, for a “family of schools,” and at the district level. Thus, a significant portion of the resources for systemic change must be used to design and implement the set of integrated mechanisms that constitute the temporary, but essential, infrastructure for steering, facilitating, and evaluating the change process itself.

Part of a systemic change infrastructure are teams of “champions” who agree to steer the process. Such a team provides a broad-based and potent mechanism for guiding change. At the school level, for example, such a steering group creates a special leadership body to own the linked visions for school improvement and systemic change and to guide and support the work. These advocates must be competent with respect to what is planned, and they should be highly motivated not just to help get things underway but to ensure sustainability.

The first focus of these teams is on assuring that capacity is built to accomplish the desired systemic changes. This includes ensuring an adequate policy and leadership base for implementation. If essential policy and staffing are not already in place, this becomes the first focus for the group.

Capacity building, of course, also includes special training for change agents. Over time, the main functions of a steering group are to ensure that staff assigned to facilitate changes (a) maintain a big picture perspective, (b) make appropriate movement toward long-term goals, and (c) have sufficient support and guidance.

Steering groups should not be too large. For example, at a school level, membership should include a few well-connected “champions” and the key change agents (e.g., the administrative leader and other system change staff) who have responsibility for implementing school improvements. To work against the perception that it is a closed, elite group, it can host “focus groups” to elicit input and feedback, provide information, and problem solve.

As indicated in Figure 2, one way for a district to conceive the daily operational infrastructure for systemic change is in terms of a *system change staff* (e.g., Organization Facilitators). As a group, such district staff has full-time responsibility for creating readiness, coalition building, implementing strategic plans, maintaining daily oversight, problem solving, resolving stakeholder conflicts, and so forth. They provide a necessary organizational base and skilled personnel for diffusing improvements into a school and across a district. Organization Facilitators can rotate among schools to guide the change process. In addition, special “coaches” or mentors can be brought in whenever a specialist is needed to assist in replicating a specific type of improvement.

Organization Facilitators. Some years ago, as part of a federal dropout prevention initiative, we developed a change agent position called an Organization Facilitator to aid with major restructuring (Adelman & Taylor, 1997a, 1997b, 1997c; Center for Mental Health in Schools, 2000; 2001a, 2001b; Taylor et al., 1999). This form of specially trained change agent embodies the necessary expertise to help school sites and complexes substantively implement and institutionalize school improvements. Such an individual can be used as a change agent for one school or a group of schools. A cadre of such professionals can be used to facilitate change across an entire district. The focus can be on changes in a few key aspects or full-scale restructuring.

One of the first functions of an Organization Facilitator is to help form and train an on-site change *team* that includes a site administrator and encompasses work groups. With the change agent initially taking the lead, members of the school’s change team learn to be catalysts and managers of change. After initial implementation, the change team focuses on ensuring maintenance and renewal. Clearly, substantive school improvements require site team members who are committed each day to ensuring effective systemic change and who have enough time and ability to attend to details.

Change team. Members of the school’s change team (and its work groups) learn to be catalysts and managers of change. The intent is for them to ensure the “big picture” is implemented in ways that are true to the

vision and compatible with the local culture. Team members help develop linkages among resources, facilitate redesign of regular structural mechanisms, and establish other temporary mechanisms. They also are problem solvers—not only responding as problems arise but taking a proactive stance by designing strategies to counter anticipated barriers to change, such as negative reactions and dynamics, common factors interfering with working relationships, and system deficiencies. Their goal is to do all this in ways that enhance empowerment, a sense of community, and general readiness and commitment to new approaches. After initial implementation, they focus on ensuring that already institutionalized mechanisms take on functions essential to maintenance and renewal.

During initial implementation, the need for mentors and coaches is acute. Inevitably new ideas, roles, and functions require a variety of stakeholder development activities. An Organization Facilitator is among the first providing mentorship. The school's change team also identifies mentors already at the school and others in the district who have relevant expertise. To expand the local pool, other stakeholders can usually be identified and recruited as volunteers to offer peer support. A regularly accessible cadre of mentors and coaches is an indispensable resource in responding to stakeholders' daily calls for help. (Ultimately, every stakeholder is a potential mentor or coach for somebody.) In most cases, the pool may need to be augmented periodically with specially contracted coaches.

Strategies in facilitating systemic change. Using the frameworks, drawing on available literature, and based on our own efforts in the field (e.g., Argyris, 1993; Center for Mental Health in Schools, 2001b; Duffy, 2005; Fullan, 2005; Glennan et al., 2004; Sarason, 1996; Thomas, 2002), we have begun to operationalize strategies to facilitate systemic changes. To illustrate, a few of the strategies are discussed in the following paragraphs.

As we have noted, any move toward substantive systemic change should begin with activity designed to create readiness by enhancing a climate/culture for change. Steps include:

- Articulation of a clear, shared vision for the changes (e.g., building interest and consensus; introducing basic concepts to relevant groups of stakeholders)
- Mobilizing interest, consensus, and support among key stakeholders (e.g., identifying champions and other individuals who are committed to the changes; planning and implementing a "social marketing" strategy to mobilize a critical mass of stakeholder support; planning and implementing strategies to obtain the support of key policy-makers, such as administrators and school boards)

- Clarifying feasibility (e.g., how necessary changes can be accomplished; who will lead; what mechanisms can be used to steer and underwrite the change process)
- Ensuring there is a major policy commitment from all participating stakeholders (e.g., establishing a policy framework that recognizes the importance of the work)
- Negotiating agreements with decision makers and implementers (e.g., about role responsibilities; about how accountability for commitments will be assured).

This is followed by processes for enhancing/developing an infrastructure based on a clear articulation of essential functions (e.g., mechanisms for governance and priority setting, steering, operations, resource mapping and coordination). Pursuing the work requires special attention to the problem of the match between intervention and those who are to change, as well as (a) ensuring there is strong facilitation related to all mechanisms; (b) redeploying resources and establishing new ones; (c) building capacity (especially personnel development and strategies for addressing personnel and other stakeholder mobility); and (d) establishing standards, evaluation processes, and accountability procedures. Because substantive change requires stakeholder readiness and ongoing motivation and capability, it is essential to monitor these matters and to maintain an ongoing emphasis on social marketing and capacity building.

Clearly, the many steps and tasks just described call for a high degree of commitment and relentlessness of effort. Moreover, time frames for building capacity to accomplish desired institutional changes must be realistic. Major systemic changes are not easily accomplished. Awareness of the myriad political and bureaucratic difficulties involved in making major institutional changes, especially with limited financial resources, leads to the caution that the type of approach described is not a straightforward sequential or linear process. Rather, the work proceeds and changes emerge in overlapping and spiraling ways, and those interested in generating systemic changes need to be opportunistic.

A Few General Comments About Systemic Change Practices at Schools

Although many of the points about systemic change seem self-evident, their profound implications for school improvement are widely ignored. As a result, it is not surprising that so many efforts to improve schools fail.

From the perspective of systemic change, creating an atmosphere at a school and throughout a district that encourages mutual support, caring,

and a sense of community takes on added importance. New collaborative arrangements must be established, and authority (power) redistributed. Key stakeholders and their leadership must understand and commit to the changes, and the commitment must be reflected in policy statements and creation of an organizational and operational infrastructure at all levels that ensures effective leadership and resources.

For significant systemic change to occur, policy and program commitments must be demonstrated through effective allocation and redeployment of resources. That is, finances, personnel, time, space, equipment, and other essential resources must be made available, organized, and used in ways that adequately operationalize and sustain policy and promising practices. As previously stressed, this includes ensuring sufficient resources to develop an effective structural foundation, albeit a temporary one, for systemic changes and related capacity building.

Reforms and major school improvements obviously require ensuring that those who operate essential mechanisms have adequate training, resources, and support, initially and over time. Moreover, there must be appropriate incentives and safeguards for individuals as they become enmeshed in the complexities of systemic change.

Positive and Negative Results

Systems are driven by what is measured for purposes of accountability. This is particularly so when systems are the focus of major reform. Accountability is a policy instrument, and under reform conditions, policy-makers often mandate quick and direct outcome indicators. This leads to measures aimed at holding program administrators and staff prematurely accountable for yearly indicators that have a *direct* relationship to long-term desired outcomes. The negative effects of this with respect to achieving the desired long-term results tend to be downplayed. Moreover, almost no attention is paid to unintended outcomes (negative or positive). Thus, cost-benefit and cost-efficacy analyses tend to be misleading.

Current school accountability is a good example of this state of affairs. Prevailing accountability mandates have had extraordinary power in reshaping schools—for good and for bad. The influence can be seen in classrooms everyday. With the increasing demands for academic accountability, the only outcome measures that really count are achievement test scores. These tests have become the be-all and end-all of what is attended to by many decision makers. This produces a growing disconnect between the realities of what is needed to enhance academic performance and what is included in school improvement plans. Specifically, too little attention is paid to addressing barriers to learning and how to accomplish desired

school improvements. As a result, short-term and intermediate outcomes that are critical benchmark and progress indicators related to such concerns are not gathered.

As indicated already, the frameworks outlined above provide a template for establishing subsets of benchmarks (short-term outcomes) and intermediate outcomes for purposes of formative evaluation in pursuing systemic changes. In addition, there are a variety of benchmarks directly related to school improvement efforts designed to address barriers to learning and teaching (Adelman & Taylor, 2006a). Examples include increased attendance, reduced tardiness, reduced misbehavior, less bullying and sexual harassment, increased family involvement with child and schooling, fewer inappropriate referrals for specialized assistance and for special education, fewer pregnancies, and fewer suspensions and drop-outs; additional long-term results stem from school improvement efforts to enhance social and personal functioning (e.g., measures of social learning and behavior, character/values, civility, healthy and safe behavior).

Clearly, it is the long-term outcomes that indicate whether systemic changes related to school improvement are effective. Equally evident is the need to evaluate systemic change with respect to the processes being used to get from here to there. This means gathering data on short-term and intermediate outcomes that allow for formative evaluation of processes as well as progress. Only after systemic changes have been well established can one really determine whether the school improvements are effective in enhancing long-term student outcomes.

PROJECTS AS CATALYSTS FOR SYSTEMIC CHANGE

With a view to sustaining valued functions, most demonstration projects and initiatives can be a catalyst for systemic change. More to the point, it is frequently the case that such projects *must* produce systemic changes or much of what they have developed is unlikely to be sustained. Federally funded projects, such as those established through the Safe Schools/Healthy Students initiative (U.S. Departments of Education, Health and Human Services, and Justice, n.d.), illustrate both the need and opportunity for being a catalytic force. These projects are funded with the aim of coalescing school and community collaboration for violence prevention. As the first cohort of projects entered their 3rd and final year of federal support, the scramble began to find another grant to sustain threatened functions. Much earlier, a few projects realized that sustainability should not be thought about in terms of hopefully finding more grant money. Rather, they understood the necessity of taking steps each year to move policy in

ways that would sustain the valued functions established through the project's work. Moreover, they understood the importance of embedding such functions in a broader context to enhance their status in the eyes of policymakers.

Because the categorical agenda was to improve violence prevention, most Safe Schools/Healthy Students' projects took the tack of adding on some services and programs. Although local policymakers were pleased that such projects brought in added resources, they also viewed the work in terms of the limited categorical emphasis and seldom integrated the project's services and programs into school improvement planning. This contributed to the fragmentation and marginalization that characterizes school and community efforts to address the many barriers to learning and teaching, and usually worked against sustaining the innovations when the project ended.

To counter the tendency toward viewing project functions as having limited value, project staff must view their special funding as an opportunity to leverage systemic changes to ensure sustainability of valuable school improvements. To this end, they must strive to reframe the work into a broader context and find their way to key decision-making tables. For example, the activity can be braided into other school improvement initiatives and presented as an integral part of a comprehensive, multifaceted, and cohesive approach that enhances the school's ability to meet its mission for many, not just a few, students and families. At the same time, it is important for staff to negotiate for inclusion into prevailing decision making, capacity building, and operational infrastructures. Being at decision-making tables enables direct and ongoing discussion about sustainability and even about replicating the work on a large scale. By moving in these directions, project staff position themselves to be a catalytic force.

POLICY IMPLICATIONS

Given that systemic change is of central importance in efforts to improve schools and schooling, we suggest policy decision makers must recognize and support a growing research and training agenda to advance understanding and capability for designing, implementing, and sustaining prototypes and taking them to scale.

Research

As noted above, the nation's research agenda does not include major initiatives to delineate and test models for widespread replication of education

reforms. Relatedly, too little attention has been paid to the complexities of implementation and large-scale diffusion of empirically supported practices. (Indeed, the emphasis has been mainly on studying diffusion of such practices in terms of the problem of replication with fidelity rather than viewing it as a particular instance of effecting systemic change.) Thus, the following recommendations are made:

Recommendation 1: Elevate the priority status of federal research related to understanding systemic change concerns involved in school improvement. The emphasis should be on building conceptual models and developing and evaluating specific interventions for dealing with the processes and problems associated with introducing, sustaining, and scaling-up (diffusing) new initiatives and reforms.

Although it is increasingly common for agencies to include an emphasis on the importance of sustainability of innovations when issuing “requests for application,” it is unclear how seriously the matter is taken in preparing proposals and in decisions about which are funded. Thus:

Recommendation 2: Requests for application for developing and evaluating school interventions should not only focus on the proposed prototype, but require a strategic plan that details how the work will be sustained beyond the period of funding and how and to what degree it will be replicated.

Pre- and In-Service Training

Both the available literature and our work in the field make it evident that leadership training for education policymakers and administrators has given short shrift to systemic change processes and problems. Thus, it is not surprising to find that most school improvement planning guides do not include a focus on how the improvements will be accomplished, and personnel who are expected to act as change agents in districts and schools have relatively little specific training in facilitating major systemic changes. Thus:

Recommendation 3: Policymakers should ensure that school improvement planning guides are expanded to include a section on how the improvements will be accomplished.

Recommendation 4: A portion of funds currently allocated for school improvement should be redeployed to underwrite the costs of devel-

oping staff for systemic change, especially training for change leadership and change agent staff.

Recommendation 5: School accountability and certification reviews should be expanded to prominently include concerns related to leadership and staff development for implementing and evaluating the systemic changes needed to accomplish planned school improvements.

Operational Supports and Evaluation Safeguards

Finally, reforms and major school improvements obviously require ensuring that those who operate essential mechanisms not only have adequate training, but also have essential resources and support, initially and over time. Moreover, there must be appropriate incentives and safeguards for individuals as they become enmeshed in the complexities of systemic change. These are matters that require the following school board and administrative actions:

Recommendation 6: Allocations for every major initiative for school improvement should include a separate, albeit temporary, budget to underwrite the costs of effective systemic change and should reflect a commitment to sustainability.

Recommendation 7: Special personnel evaluation and accountability procedures should be formulated for use during periods of major systemic change to make allowances for dips in performance as schools cope with the extraordinarily complex problems that inevitably arise in pursuing comprehensive school improvements.

CONCLUDING COMMENTS

Those who set out to improve schools and schooling across a district are confronted with two enormous tasks. The first is to develop prototypes; the second involves large-scale replication. One without the other is insufficient. Yet considerably more attention is paid to developing and validating prototypes than to delineating and testing systemic change processes required for sustainability, replication, and scale-up. Clearly, it is time to correct this deficiency.

In doing so, however, it is essential not to lose sight of the simple truth: If improvements don't play out effectively at a school and in the classroom,

they don't mean much. Schools and classrooms must be the center and guiding force for all prototype and systemic change planning.

At the same time, it is essential not to create a new mythology suggesting that every classroom and every school is unique. There are fundamentals that permeate all efforts to improve schools and schooling, and that should continue to guide policy, practice, research, and training.

These include the following, for example:

1. The curriculum in every classroom must include a major emphasis on acquisition of basic knowledge and skills. However, such basics must be understood to involve more than the old "three Rs" and cognitive development. There are many important areas of human development and functioning (such as those encompassed by the major movement for enhancing social and emotional learning in schools), and each contains "basics" that individuals may need help in acquiring. Moreover, any individual may require special accommodation in any of these areas.

2. Every classroom must address student motivation as an antecedent, process, and outcome concern.

3. Special assistance must be *added* to instructional programs for certain individuals, but only after the best nonspecialized procedures for facilitating learning have been tried. Moreover, such procedures must be designed to build on strengths and must not supplant continued emphasis on promoting healthy development.

4. Beyond the classroom, schools must have policy, leadership, and mechanisms for developing schoolwide programs to address barriers to learning. Some of the work will need to be in partnership with other schools, and some will require weaving school and community resources together. The aim is to evolve a comprehensive, multifaceted, and integrated continuum of programs and services ranging from primary prevention through early intervention to treatment of serious problems. Our work suggests that at a school this will require evolving programs to (a) enhance the ability of the classroom to enable learning, (b) provide support for the many transitions experienced by students and their families, (c) increase home involvement, (d) respond to and prevent crises, (e) offer special assistance to students and their families, and (f) expand community involvement (including volunteers).

5. Relatedly, decision makers at all levels must revisit current policy using the lens of addressing barriers to learning with the intent of both realigning existing policy to foster cohesive practices and enacting new policies to fill critical gaps.

6. Leaders for education reform at all levels are confronted with the need to foster effective scale-up of promising reforms. This encompasses a

major thrust to develop efficacious demonstrations and effective models for replicating new approaches to schooling on a large scale.

For significant prototype development and systemic change to occur, policy and program commitments must be demonstrated through effective allocation and redeployment of resources to facilitate organizational and operational changes. That is, finances, personnel, time, space, equipment, and other essential resources must be made available, organized, and used in ways that adequately operationalize policy and promising practices. This includes ensuring sufficient resources to develop an effective structural foundation for prototype development, systemic changes, sustainability, and ongoing capacity building.

We do not mean to belabor all this. Our point simply is to make certain that there is a greater appreciation for and more attention paid to the problems of systemic change. To do less is to undermine substantive systemic change and perpetuate an unsatisfactory status quo. As Seymour Sarason (1971) stressed a long time ago,

Good ideas and missionary zeal are sometimes enough to change the thinking of individuals; they are rarely, if ever, effective in changing complicated organizations (like the school) with traditions, dynamics, and goals of their own. (p. 213)

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