On Sustainability of Project Innovations as Systemic Change

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Too many promising innovations disappear when project funding ends. As a result, interest in the problem of sustainability has increased markedly in recent years. This article explores this problem in terms of systemic change. Highlighted are basic ideas, phases, stages, steps, and lessons learned related to the planning, implementation, maintenance, and scale-up of school-based innovations. A particular emphasis is on efforts designed to enhance how schools address barriers to learning and teaching. The discussion is framed around the idea that the likelihood of sustaining any new approach is increased if it is integrated into the fabric of existing school improvement efforts.

Properly conceived and implemented new initiatives are essential to improving schools and communities. Such innovations usually are pursued as projects, with temporary funding and staffing. When the funding ends, more often than not much of what has been developed disappears. Sometimes this is appropriate, such as when what was developed turns out not to be effective or important. At other times, the loss represents a setback for many stakeholders. The concern in such cases is how might the innovation be sustained. Optimally, sustainability should be a focus from the day a project is implemented. With most projects, however, the pressure of just becoming operational often postpones such a focus until well into the 2nd year of a 3-year funding period.

There is growing interest in understanding how to sustain effective innovations and some research related to evaluating sustainability (e.g., Century & Levy, 2002; Trickett, 2002; Woodbridge & Huang, 2000). Our

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approach to sustainability has evolved over many years, first in connection with trying to sustain demonstration programs, then as part of efforts to replicate innovations on a large scale (see Adelman & Taylor, 1997c; Taylor, Nelson, & Adelman, 1999). Confronted with the problems and processes of scale-up, we generated a broad working framework of major considerations relevant to planning, implementing, and sustaining innovative approaches and going to scale. The process of large-scale replication often is called *diffusion, replication, rollout, going to scale,* or *scale-up;* we use the terms interchangeably here.

   This article highlights basic ideas, phases, stages, steps, and lessons learned related to the planning, implementation, maintenance, and scale-up of school-based innovations. A particular emphasis is given to efforts for enhancing how schools address barriers to learning and teaching. The discussion is framed around the idea that the likelihood of sustaining any new approach is increased if it is integrated into the fabric of existing school improvement efforts. And, for this to happen, it is necessary to effect systemic changes.

TOWARD UNDERSTANDING SUSTAINABILITY AS SYSTEMIC CHANGE

A dictionary definition indicates that to *sustain* is "to keep in existence; to maintain; to nurture; to keep from failing; to endure" (*American Heritage Dictionary,* 1994). Another way to view sustainability is in terms of institutionalizing system changes. As Robert Kramer (2002) stated: "Institutionalization is the active process of establishing your initiative—not merely continuing your program, but developing relationships, practices, and procedures that become a lasting part of the community."

   Few will argue with the notion that something of value should be sustained if it is feasible to do so. Thus, the keys to sustainability are clarifying value and demonstrating feasibility. Both these matters are touched on in what follows.

Sustainability of What? Making A Strong Argument

One of the most pressing concerns to the staff of a specially funded project is sustaining their jobs when the project ends. The desire for maintaining one's job is more than understandable. The problem is that this is the weakest argument for sustainability, especially when budgets are tight.

Policymakers are constantly confronted with requests to maintain and add more personnel. Their decisions are supposed to be based on evidence of need and institutional priorities. For this reason, requests that simply advocate for sustaining all facets of a complex and expensive project also are weak. Decision makers want to know which facets are really necessary to achieve outcomes and which are nice but unessential accessories.

Strong arguments for sustaining school-based innovations are framed within a "big-picture" context of school and community efforts to strengthen students, families, schools, and/or neighborhoods. Compelling arguments (a) focus on specific functions that are essential to achieving highly valued outcomes and that will be lost when a project ends, (b) connect those functions with the overall vision and mission of the institutions asked to sustain them, and (c) clarify cost-effective strategies for maintaining the functions.

In our work, for example, we are concerned with developing innovations to better meet the needs of students experiencing learning, behavior, and emotional problems. Therefore, we always stress how often the educational mission is thwarted because of many factors that interfere with youngsters' learning and performance. We also emphasize that, if schools are to ensure that all students have an equal opportunity to succeed at school, designs for school improvement must reflect the full implications of educating all students. Clearly, "all" includes more than students who are motivationally ready and able to profit from "high-standards" demands and expectations. Thus, the focus on all must also include the many who are not benefiting from instructional reforms because of a host barriers interfering with their development and learning. These barriers include external risk factors arising from neighborhood, family, school, and peer determinants and internal conditions such as those related to biological and psychological dysfunctioning.

Then, we remind policymakers that ensuring all students have an equal opportunity to succeed at school is the reason schools invest in education support programs and services and that given how substantial the investment is, greater attention must be paid to rethinking learning supports. From this perspective, we offer the umbrella of a comprehensive, multifaceted enabling or learning support component to coalesce the full range of functions that can address such barriers. The emphasis on addressing barriers to student learning allows us to present and underscore why new approaches are needed; in particular, we stress the need to fill basic gaps in the ability of schools to engage and re-engage students in effective classroom learning. Finally, we discuss cost-effectiveness by focusing on reducing fragmentation and enhancing resource use via systemic changes

related to restructuring how existing student supports are conceived and implemented (Adelman, 1996; Adelman & Taylor, 1997b; Adelman, Taylor, & Schneider,1999; Center for Mental Health in Schools, 1999). The following sections amplify on these matters.

What's Involved in Sustaining Valued Functions?

Figure 1 provides a framework for thinking about major considerations related to planning, implementing, sustaining, and going to scale. It also can be used as a template for establishing benchmarks for purposes of formative evaluation. As the figure illustrates, changes may encompass introducing one or more interventions, developing a demonstration at a specific
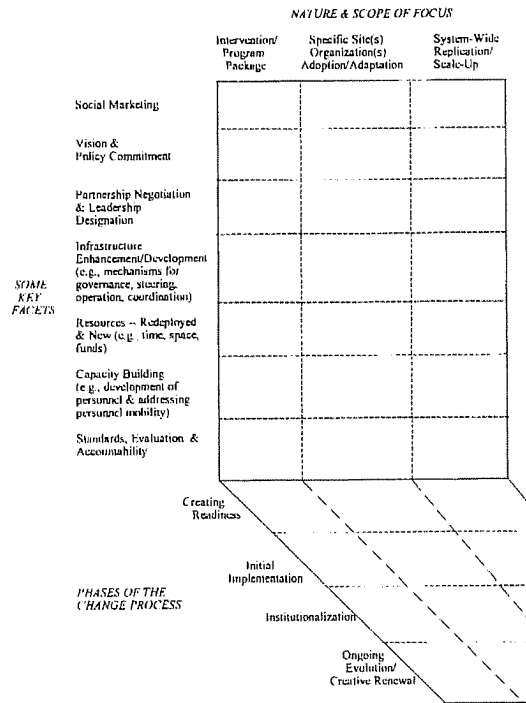

FIGURE 1   New initiatives: Considerations related to planning, implementing, sustaining, and going to scale.

site, or replicating a prototype on a large scale. Whatever the nature and scope of focus, all the key facets outlined in the figure come into play.

Each cell of the matrix diagramed in Figure 1 warrants extensive discussion. Here, we must limit ourselves to highlighting the host of interacting concerns and activities involved in sustaining valued initiatives.

1. With respect to sustainability, 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 system-wide 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 mission and policymaking.

2. With respect to *key facets*, whatever the nature and scope of the work, efforts for sustainability begin with articulation of a clear, shared vision for the initiative, ensuring there is a major policy commitment from all participating partners, negotiating partnership agreements, and designating leadership. This is followed by processes for infrastructure redesign based on a clear articulation of essential functions and including mechanisms for governance and priority setting, steering, operations, resource mapping, and coordination. Pursuing the work requires strong facilitation related to all mechanisms; redeployment of resources and the establishment of new ones; building of capacity (especially personnel development and strategies for addressing personnel and other stakeholder mobility); and the establishment of standards, evaluation processes, and accountability procedures. And, throughout, there must be ongoing attention to social marketing. Again, it should be evident that costs and the degree of importance assigned by policymakers to the various facets are shaped by the intended nature and scope of focus.

3. Approaching sustainability as systemic change requires addressing four major *phases of the change process*. We describe these phases as (a) *creating readiness*—with respect to the climate–culture for change through enhancing both the motivation and capability of a critical mass of stakeholders, (b) *initial implementation*—by phasing changes in with well-designed mechanisms for guidance and support, (c) *institutionalization*—maintaining and sustaining changes through policies and practices, and (d) *ongoing evolution and creative renewal*—through enabling stakeholders to become a community of learners. Once 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 interventions are designed and implemented during each phase.

Using the Figure 1 framework as a guide, we have organized our experiences related to sustaining innovations into a set of logical stages and steps. In subsequent sections, we also delineate the set of mechanisms we had to design and establish for developing the organizational base and skilled personnel to initiate and institutionalize systemic changes.

Sustainability Conceived as A Set of Logical Stages and Steps

The following formulation of stages and steps is designed to guide thinking about sustainability and systemic change. It is not meant as a rigid format for the work. An overriding concern in pursuing each step is to do so in ways that enhance stakeholders' readiness, especially motivational readiness. When a broad range of stakeholders are motivated to work together to sustain progress, they come up with more creative and effective strategies than any manual can prescribe. Thus, although concepts and procedures are invaluable guides, building a cadre of stakeholders who are motivationally ready and able to proceed is the first and foremost consideration. The necessary motivation comes from the desire to achieve better outcomes; it comes from hope and optimism about a vision for what is possible; it comes from the realization that working together is essential in accomplishing the vision; it comes from the realization that system changes are essential to working together effectively. And maintaining motivation for working together comes from valuing each partner's assets and contributions.

As indicated in Figure 1, the phases of the change process are a major dimension of the framework. Although these phases are rather self-evident, the intervention steps related to sustaining valued functions are less so. As a guide, we have drawn on what we learned from the literature (e.g., Argyris, 1993; Fullan & Steigelbauer, 1991; Replication and Program Services, 1993; Sarason, 1996) and our own work to delineate 16 key steps related to the first two phases of the change process (i.e., creating readiness and initial implementation). These steps are organized into four "stages." The stages are conceived in terms of the need to intervene in ways that (a) develop a strong argument for sustaining functions; (b) mobilize interest, consensus, and support among key stakeholders; (c) clarify feasibility; and (d) proceed with specific systemic changes to sustain innovations. These stages and steps are offered below as guides for specific action planning. They have been incorporated into a guidebook that outlines concrete examples and some specific tools and aids related to each step (Center for Mental Health in Schools, 2001b).

Stage 1: Preparing the argument for sustaining valued functions.   The process of preparing a strong argument for sustainability begins by ensuring that advocates for sustaining a project's functions understand the larger context in which such functions play a role. Of particular importance is awareness of prevailing and pending policies, institutional priorities and their current status, and how existing resources might be redeployed to sustain valued functions that otherwise will be lost. With this in mind, there are five steps to pursue in readying the argument:

1. Developing an understanding of the local big-picture context for all relevant interventions. This involves, for example, amassing information that clarifies the school and community vision, mission statements, current policies, and major agenda priorities.

2. Developing an understanding of the current status of efforts to accomplish goals related to the school and community vision, for example, clarifying the degree to which current priorities are well-founded and the rate of progress toward addressing major problems and promoting healthy development.

3. Delineating the functions, tasks, and accomplishments the project initiative has contributed with respect to the larger agenda and where the functions fit in terms of current policy and program priorities.

4. Clarifying what functions will be lost if the school(s) and community do not determine ways to sustain them. The emphasis here is on articulating the implications of the loss in terms of negative impact on achieving the larger agenda.

5. Articulating cost-effective strategies for sustaining functions by, for example, focusing on how (a) functions can be integrated with existing activity and supported with existing resources, (b) some existing resources can be redeployed to sustain the functions, and (c) current efforts can be used to leverage new funds.

Stage 2: Mobilizing interest, consensus, and support among key stakeholders.   In presenting the argument for sustainability, it is important to have a critical mass of influential and well-informed stakeholders who will be potent advocates for the initiative. The steps involved in developing this cadre of supporters include the following:

6. Identifying champions and other individuals who are committed to sustaining the functions and clarifying the mechanism(s) for bringing supporters together to steer and work for sustainability.

7. Planning and implementing a "social marketing" strategy to mobilize a critical mass of stakeholder support.

8. Planning and implementing strategies to obtain the support of key policymakers, such as administrators and school boards.

Stage 3: Clarifying feasibility.   The preceding steps all contribute to creating initial readiness for making decisions to sustain valued functions. The next steps encompass formulating plans that clarify specific ways the functions can become part of the larger school and community agenda. This raises considerations related to infrastructure and daily operations and the full range of systemic change concerns. These are addressed by the following steps:

9. Clarifying how the functions can be institutionalized through existing, modified, or new infrastructure and operational mechanisms, for example, mechanisms for leadership, administration, capacity building, resource deployment, and integration of efforts.

10. Clarifying how necessary changes can be accomplished, for example, mechanisms for steering change, external and internal change agents, and underwriting for the change process.

11. Formulating a longer range strategic plan for maintaining momentum, progress, quality improvement, and creative renewal.

By this point in the process, the following matters should have been clarified: (a) what valued functions could be lost, (b) why they should be saved, and (c) who can help champion a campaign for saving them. Done effectively, the process will have engendered strong motivational readiness for the necessary systemic changes.

Stage 4: Proceeding with specific systemic changes to sustain innovations.   At this juncture, it is time to initiate the implementation process for the necessary systemic changes. Because substantive change requires stakeholder readiness, it is essential to determine whether the preceding steps accomplished the task. If not, it becomes necessary to revisit some of the earlier steps. Then, it is a matter of carrying out the plans made during Stage 3 with full appreciation of the complex dynamics that arise whenever major systems undergo change. Specific steps encompass the following:

12. Assessing, and if necessary enhancing, readiness to proceed with systemic changes needed to sustain valued functions.

13. Establishing an infrastructure and action plan for carrying out the changes.

14. Anticipating barriers and how to handle them.

15. Negotiating initial agreements, such as a memorandum of understanding.

16. Maintaining high levels of commitment to accomplishing necessary systemic changes, for example, ensuring each task–objective is attainable, ensuring effective task facilitation and follow-through, negotiating long-term agreements and policy, celebrating each success, building a community of learners, and facilitating renewal.

Clearly, the many steps and tasks described above call for a high degree of commitment and relentlessness of effort. 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 above is not a straightforward, sequential process. Rather, the work proceeds, and changes emerge in overlapping and spiraling ways.

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, 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, staff must strive to reframe the work and find their way to key decision-making tables. This encompasses placing the activity into a broader context in terms of intervention focus. For example, the activity can be braided into other 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 to negotiate for full inclusion in prevailing decision making, capacity building, and operational infrastructures in order to effect decisions and work toward reversing existing fragmentation and marginalization. Being at decision-making tables also enables direct and ongoing discussion with decision makers about the feasibility of replicating the work on a large scale and combining it with other initiatives to enhance intervention effectiveness. By moving in these directions, project staff position themselves to be a catalytic force.

ESCAPING PROJECT MENTALITY

For projects to play a catalytic role for systemic change, staff must be mobilized to do so. And this requires overcoming the phenomenon that has been dubbed "project mentality."

Project Mentality is A Barrier

A common tendency is for those involved in a project to think about (a) their work as simply a specially funded project and (b) their jobs as providing project-based discrete services. It also is common for policymakers and

those interacting with project staff to assume the work will end when the grant runs out. It is not surprising, then, that everyone sees the new activity mainly in narrow and time-limited terms. This mind-set contributes to fragmented approaches and marginalized status and, thus, works against developing comprehensive, multifaceted, and integrated programs for enhancing long-term positive results for school and community. It also works against capitalizing on the opportunity to be a catalyst for the type of systemic changes that sustain and expand innovations.

Moreover, as the funding cycle nears its end, a number of very human concerns make it difficult for staff to focus on systemic change as the key to sustaining valued functions. These concerns include fear of program elimination and job loss and belief that extramural funding is the only hope. These concerns push project staff to pursue a limited strategy for sustainability—seeking additional, dedicated funding to continue as a categorical project, rather than focusing on systemic changes that can incorporate valuable innovations.

Strategies for Overcoming Project Mentality

Overcoming project thinking begins with redefining the work. Rather than allowing it to be seen as a 1-, 2-, or 3-year project, it can be reconceived as an ongoing initiative. After receiving a grant, we recommend never again referring to the work as a *project*. Next, it is important to establish a potent steering body (not a figurehead advisory board). Such a body should consist of influential champions for the initiative and other individuals who are highly committed to steering the staff to work in ways that not only achieve immediate objectives but can catalyze systemic changes.

Early in the 1st year, the plan detailed in the project proposal should be morphed into a strategic plan for the ongoing initiative. This evolved plan should cover at least 2 years of activity beyond the funding period and should delineate, for each year, plans related to sustainability. As early as feasible, the steering body should push for adoption by policymakers of the full strategic plan.

An ongoing strategic concern involves enhancing staff motivation and capability to play a catalytic role. The complexity of building their capacity requires guidance and support from professionals with mastery-level competence for creating a climate for change, facilitating change processes, and establishing an institutional culture of continuous learning.

CREATING A CLIMATE AND INFRASTRUCTURE
FOR CHANGE TO SUSTAIN INNOVATIONS

One of the most fundamental errors related to facilitating systemic change is the tendency to set

actions into motion without taking sufficient time to lay the foundation needed for substantive 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 & Steigelbauer, 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.
- Accomplishment of change in stages and with realistic timelines.
- Provision of progress feedback.
- Institutionalization of 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 the 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).

Building on what is known about organizational change, we have worked for many years on a change model for use in establishing, sustaining, and scaling up school and community innovations (e.g., Adelman & Taylor, 1997c; Taylor et al., 1999). In this context, we have identified several temporary mechanisms that can be established to facilitate and guide implementation of innovation in ways that lay a solid foundation for sustaining new approaches. These temporary infrastructure mechanisms are meant to be phased out once changes are institutionalized.

We view four key temporary mechanisms as invaluable. These are (a) a site-based *steering* mechanism to guide and support the pursuit of the vision; (b) a site-based *change team* that has responsibility for coalition building, implementing the strategic plan, and maintaining daily oversight, problem solving, conflict resolution, and so forth; (c) a *change agent* (e.g., organization facilitator) who works with the change team and has full-time responsibility for the daily tasks involved in creating readiness and the initial implementation of desired changes; and (d) *mentors* and *coaches* who model and teach specific elements of new approaches.

Steering at Each Jurisdictional Level

When it comes to schools, systemic change requires shifts in policy and practice at several levels, including school, "family" of schools, school district, and surrounding community. Each jurisdictional level should be involved in one or more steering mechanisms. A steering mechanism can be a designated individual or a small committee or team. The functions of such mechanisms include oversight, guidance, and support of the change process to ensure success. If a decision is made to have separate steering mechanisms at different jurisdictional levels, an interactive interface is needed between them. And, of course, a regular, interactive interface is essential between steering and organizational governance mechanisms. Steering mechanisms are the guardians of the big-picture vision.

Change Agent and Change Team

During replication, tasks and concerns must be addressed expeditiously. The main work revolves around the planning and facilitating of the following:

- Infrastructure development, maintenance, action, mechanism liaison and interface, and priority setting.
- Stakeholder development, especially coaching, with an emphasis on creating readiness both in terms of motivation and skills, team building, providing technical assistance, and organizing basic interdisciplinary and "cross-training."
- Communication and visibility, resource mapping, analyses, coordination, and integration.
- Formative evaluation and rapid problem solving.
- Ongoing support.

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

One of the first functions of such a facilitator is to help form and train an on-site change team. Such a team, which includes various work groups, consists of personnel representing specific programs, administrators, union chapter chairs, and staff skilled in facilitating problem solving and mediating conflicts. This composition provides a blending of outside and internal agents for change who are responsible and able to address daily concerns.

With the change agent initially taking the lead, members of the change team (and its work groups) are catalysts and managers of change. As such, they must 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. They do all this in ways that enhance empowerment, a sense of community, and general readiness and commitment to new approaches. After initial imple-

mentation, they focus on ensuring that institutionalized mechanisms take on functions essential to maintenance and renewal. Clearly, we are describing a great deal of work. Success requires team members who are committed each day to ensuring effective replication and who have enough time and ability to attend to details.

Mentors and Coaches

During initial implementation, the need for mentors and coaches is acute. Inevitably new ideas, roles, and functions require a variety of stakeholder development activities, including demonstrations of new infrastructure mechanisms and program elements. An organization facilitator is among the first providing mentorship. The change team must also identify mentors indigenous to a particular site and others in the system 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.

BUILDING INFRASTRUCTURE FROM
LOCALITIES OUTWARD

From the onset of any initiative, we recommend that sustainability be thought about in terms of both maintaining and scaling up. This perspective helps ensure an early focus on infrastructure building. The focus is on ensuring there is an effective and interconnected infrastructure of organizational and operational mechanisms at a school, for a family of schools, and systemwide to provide oversight, leadership, resource development, and ongoing support. Such mechanisms provide ways to (a) arrive at decisions about resource allocation; (b) maximize systematic and integrated planning, implementation, maintenance, and evaluation of innovations; (c) perform outreach to create formal working relationships with community resources to bring some to a school and establish special linkages with others; and (d) upgrade and modernize all activity to reflect the best intervention thinking and use of technology. At each system level, accomplishing tasks requires that staff adopt some new roles and functions and that parents, students, and other representatives from the community enhance

their involvement. Cost-effectiveness also calls for redeployment of existing resources, as well as finding new ones.

From a school's perspective, few programs or services have relevance if they don't play out effectively at the school site or in the local community. It is a good idea, therefore, to conceive systemic change from the school outward. That is, the first focus is on mechanisms at the school–neighborhood level. Then, based on analyses of what is needed to facilitate and enhance efforts at a locality, mechanisms are conceived that enable several schools and localities to work together to increase efficiency and effectiveness and achieve economies of scale. Then, systemwide mechanisms can be (re)designed to provide support for what each school and its surrounding neighborhood are trying to develop. A brief discussion of mechanisms at each level follows.

Site-Based Resource-Oriented Team

From a school's perspective, there are three overlapping challenges in moving from piecemeal approaches to an integrated approach for addressing barriers to learning and promoting healthy development. One involves weaving existing activity together. A second entails evolving programs so they are more effective. The third challenge is to reach out to others in ways that expand resources. Outreach encompasses forming collaborations with other schools, establishing formal linkages with community resources, and attracting more volunteers, professionals-in-training, and community resources to work at the school site.

Meeting the above challenges requires development of well-conceived mechanisms that are appropriately sanctioned and endowed by governance bodies. A good starting place is to establish a *resource-oriented team* (e.g., a resource coordinating team) at a specific school (Adelman & Taylor, 2002; Center for Mental Health in Schools, 2001a; Rosenblum, DiCecco, Taylor, & Adelman, 1995). Properly constituted, a resource team leads and nurtures efforts to maintain and improve a multifaceted and integrated approach. This includes developing local partnerships. Such a team helps reduce fragmentation and enhances cost efficacy by analyzing, planning, coordinating, integrating, monitoring, evaluating, and strengthening ongoing efforts.

In turn, to ensure daily programmatic activity is well-designed and evolves over time, the resource team helps establish and coordinate teams for each programmatic arena of activity at a school. For example, in our work, we organize around the overarching concept of an enabling compo-

nent that consists of a six-area "curriculum" (Adelman & Taylor, 1997b; Center for Mental Health in Schools, 1999). In forming program teams, identifying and deploying enough committed and able personnel may be difficult. Initially, a couple of motivated and competent individuals can lead the way in a particular area—with others recruited over time as necessary and/or interested. Some "teams" might even consist of one individual. In some instances, one team can address more than one programmatic area.

Because most schools are unable to develop many new program areas simultaneously, they must establish priorities and plans for how to develop and phase in new programs. The initial emphasis, of course, should be on weaving together existing resources and developing program teams designed to meet the school's most pressing needs, such as enhancing programs to provide student and family assistance, crisis assistance, and prevention and finding ways to enhance how classrooms handle garden-variety learning, behavior, and emotional problems.

Another key infrastructure concern is administrative leadership. Most schools do not have an administrator whose job definition outlines a leadership role and functions related to activities that are not primarily focused on academics, and this is not a role for which most principals have time. Thus, it is imperative to establish a policy and restructure jobs to ensure there is a *site administrative leader* for moving from piecemeal approaches to an integrated approach for addressing barriers to learning and promoting healthy development. Such a role may be created by redefining a percentage (e.g., 50%) of a vice principal's or assistant principal's day or, in schools that are too small to have such personnel, the principal might delegate some administrative responsibilities to a coordinator. This leader must sit on the resource-oriented team and then represent and advocate the team's recommendations to the administrative team, at governance body meetings, and wherever else decisions are made regarding programs and operations—especially decisions about use of space, time, budget, and personnel.

Paralleling the administrative lead is the position of a *staff lead*. This individual can be identified from the cadre of line staff who have expertise with respect to addressing barriers to student learning and promoting healthy development, such as support service personnel. If a site has a center facility, such as a family or parent resource center or a health center, the center coordinator might fill this role. This individual also must sit on the resource team and advocate at key times for the team's recommendations at the administrative and governance body tables.

Besides facilitating the development of a potent approach for addressing barriers to learning and promoting healthy development, both the administrative and staff leads play key operational roles related to daily implementation, monitoring, and problem solving. Obviously, if they are to have the time to carry out these special functions, their job descriptions must rewritten to delineate their new responsibilities and associated accountabilities (see Center for Mental Health in Schools, 1999).

At the Feeder Pattern and Neighborhood Level

Neighboring schools have common concerns and may have programmatic activity that can use the same resources. By sharing, they can eliminate redundancy and reduce costs. Some school districts already pull together clusters of schools to combine and integrate personnel and programs. These are sometimes called complexes or families of schools. A multilocality *resource-oriented council* provides a mechanism to help ensure cohesive and equitable deployment of resources and also can enhance the pooling of resources to reduce costs. Such councils can be particularly useful for pulling together the overlapping work of high schools and their feeder middle and elementary schools and integrating neighborhood efforts. Connecting the work of feeder schools is particularly important because they often encompass families with youngsters attending several levels of schooling at the same time. With respect to linking with community resources, multilocality teams are especially attractive to community agencies who do not have the time or personnel to link with individual schools.

To create a council, one to two representatives from each school's resource team can be chosen to meet at least once a month and more frequently as necessary. The functions of such a mechanism include (a) coordinating and integrating programs serving multiple schools and neighborhoods, (b) identifying and meeting common needs with respect to guidelines and staff development, and (c) creating linkages and collaborations among schools and agencies. More generally, the council provides a useful mechanism for leadership, communication, maintenance, quality improvement, and ongoing development of a comprehensive continuum of programs and services. Natural starting points for councils are the sharing of needs assessment, resource mapping, analyses, and recommendations for reform and restructuring to better address barriers to learning and development. Specific areas of initial focus may be on such matters as addressing community–school violence and developing prevention programs and safe school and neighborhood plans.

Representatives from resource councils can be invaluable members of community planning groups, such as service planning area councils and local management boards. They bring information about specific schools, clusters of schools, and neighborhoods and do so in ways that can promote the sustainability of new approaches.

Systemwide Mechanisms

Matters related to comprehensive approaches best achieved through school–community partnerships also appear regularly on the agenda of school-district administrators and local school boards. The problem at this level is that each item tends to be handled in an ad hoc manner without sufficient attention to the big picture. One result is that the administrative structure in the school district is not organized in ways that coalesce its various programs and services for addressing barriers and promoting healthy development. The piecemeal structure reflects the marginalized status of such functions and both creates and maintains the fragmented policies and practices that characterize efforts to address barriers.

To correct the problem, several systemwide mechanisms have been identified to ensure coherent oversight and leadership in developing, maintaining, and enhancing the component for addressing barriers to learning, development, and teaching. One is a *systemwide leader* (e.g., an assistant superintendent) with the responsibility and accountability for systemwide vision and strategic planning related to the component. Large districts require additional organizational and administrative mechanisms to provide a critical mass of systemwide leaders and to coordinate resources.

As noted above, a cadre of organization facilitators provide a change agent mechanism that can assist in the development and maintenance of resource-oriented teams and councils. Such personnel also can help organize basic interdisciplinary and cross-training to create the trust, knowledge, skills, and attitudes essential for successful working relationships related to infrastructure mechanisms. Through such training, each profession has the opportunity to clarify roles, activities, strengths, and accomplishments and to learn how to link with each other.

Ultimately, it is the local school board and community governance and planning bodies that must ensure an enduring policy commitment, resources, and planning for comprehensive and cohesive approaches. This calls for formal connections between community planning bodies and boards of education with respect to analyzing the current state of the art,

developing policy, and ensuring effective implementation (see Center for Mental Health in Schools, 1998).

Figure 2 illustrates the various linkages described above. Although the emphasis in the figure is on the types of mechanisms that schools can establish, the eventual goal is to create effective and long-lasting school, home, and community collaboratives (Adelman & Taylor, 2002). Such collaboratives bring together the range of stakeholders needed to braid resources and facilitate the type of systemic changes that can maximize the likelihood of sustaining valued initiatives. Well-designed resource coordinating councils can meld with an existing neighborhood collaborative or can be the foundation for establishing such a collaborative if none exists.

CONCLUDING COMMENTS

Obviously, no single project can transform a school, never mind a school district. At the same time, any project can be a catalyst for change. The first step is to avoid setting up a separate infrastructure and conveying the image of a project that is limited in focus and duration. The next steps involve proposing ways to integrate the work with related activity, defining functions in ways that stress commonalities, and then determining whether the existing infrastructure can do what is necessary or should be modified.

Of course, efforts to create systemic changes require much more than implementing demonstrations at a few sites. Improved approaches are only as good as the ability of a school district and a community to de-
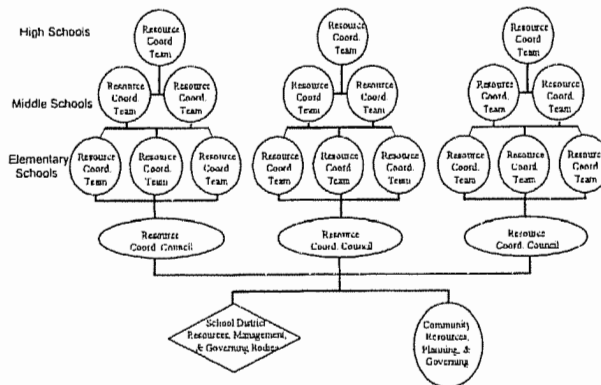

FIGURE 2   Mechanisms for linking school and community resources.

velop, institutionalize, and sustain them on a large scale. For the most part, education and community researchers and reformers have paid little attention to the complexities of such large-scale diffusion. This is evident from the fact that the nation's research agenda does not include major initiatives to delineate and test models for widespread replication of school-based innovations. Furthermore, leadership training gives short shrift to the topic of systemic change. Thus, it is not surprising that the pendulum swings that characterize school "reforms" do not come with the resources necessary to accomplish prescribed changes throughout a school district in an effective manner. Common deficiencies include inadequate strategies for creating motivational readiness among a critical mass of stakeholders, especially principals and teachers; assignment of change agents with relatively little specific training; and the scheduling of unrealistically short time frames for building capacity to accomplish desired institutional changes and outcomes.

Another chronic problem related to making and sustaining systemic change is the fact that stakeholders come and go. There are administrative and staff changes; some families and students leave; newcomers arrive; outreach brings in new participants. A constant challenge is to maintain the vision and commitment and to develop strategies for bringing new stakeholders on board and up to speed. Addressing this problem requires recycling through capacity-building activity in ways that promote the motivation and capability of new participants.

The breadth of what we have presented will seem daunting to many. A reasonable reaction is "But what can I do immediately to sustain valued functions while I work over time to affect policy, leadership, infrastructure, and scale up?" A good initial focus for catalyzing and leveraging change is to "social market" data from various sources indicating the positive outcomes for schools and students of what should be sustained. In general, publicizing any information indicating the value and wisdom of an innovation is a critical element in nurturing and sustaining the approach. It is essential, of course, to get the message out in ways that can influence key decision makers.

Unfortunately, there are no shortcuts. Little of what we describe above is dispensable. We have learned this hard fact through experiences across the country. For example, in one large district the superintendent was committed to building a strong component for learning support at every school. Support services were reorganized to begin this process. However, what had been a strong beginning was completely undercut when the superintendent moved on to another job. Our analysis is that the failure to sustain was due to the lack of a policy commitment on the part of the

school board and limited readiness on the part of many principals and support service staff with respect to understanding and valuing the changes.

In another large district, the school board endorsed a policy for restructuring student support to improve efforts to address barriers to learning, change agent positions were created, and a resource coordinating council was established for each cluster or family of schools. However, when key district leaders moved on, there was no steering group in place and no process to orient and bring new leadership up to speed. As a result, commitment to the changes is waning.

In yet another district, those in leadership positions for student support services are committed to the making and sustaining of systemic changes to establish a comprehensive, multifaceted, and cohesive learning supports component. They are formulating a strategic initiative to move forward. In doing so, they are working with the district leadership and the school board. A steering group is to be established. An early focus will be on organizational restructuring and reframing the roles and functions of student support staff in keeping with the broadened perspective for addressing barriers to learning and promoting healthy development. This will involve capacity-building mechanisms designed to enhance the readiness of key stakeholders. This work in progress bears watching.

Another lesson learned comes from a large urban school. Over several years, the school staff developed the foundations of a comprehensive component to address barriers to learning and teaching. Recently, their efforts to sustain and evolve this component have been hampered by district mandates related to enhancing instructional practices. As the demands from the central office increase, the school administration lowers the policy priority for enhancing learning supports. The staff is now revisiting some basics related to sustainability. They realized that they had no steering group and thus no potent champions. Although the school had adopted a supportive policy, the staff had never involved the district leadership or school board in formulating districtwide policy. As a result, they were operating as an isolated reform and had done no social marketing to indicate the school improvements they were demonstrating could be scaled up across the district. The setback is not fatal but probably could have been avoided.

To end on a positive note, we point to Hawaii. Because Hawaii is a state system, policy is developed at the state level. Hawaii's policy for school improvement has been expanded to encompass three primary components: instruction, management, and student support. In pursuing new directions for student support, Hawaii's Department of Education adopted the concept of a Comprehensive Student Support System (CSSS). This is

their umbrella component for ensuring their school improvement initiatives move in new directions to develop comprehensive, multifaceted learning supports. The intent is for all schools to provide a continuum of programs and services to ensure academic, social, emotional and physical environments in which all students are enabled to learn the content taught in keeping with high performance standards. This continuum begins in the classroom, with differentiated classroom practices as the base of support for each student. It extends beyond the classroom to include school and community resources. CSSS operates in all school settings, linking students and families to the resources of the Department of Education as well as those of their neighborhood, their community, the Department of Health, and other governmental and private agencies and groups. Because the commitment to a learning support component is clear and spelled out in policy with accountability "teeth," it is moving forward in ways designed to phase in scale-up. In place are steering and leadership infrastructure mechanisms, school-based change agents (trained through a partnership with higher education), coordinators for implementation at school sites, and capacity-building mechanisms. Initially, evaluation data are being used for formative purposes. Hopefully, impact evaluation will be deferred until the system is operating in appropriate ways at the first sites. Premature emphasis on impact, especially with respect to achievement test performance, is one of the surest ways to undercut efforts to sustain promising innovations.

Finally, we stress that, given the various stakeholder groups who are essential to successful systemic change, ideas must be adapted to fit particular groups (e.g., districts, schools, agencies, and families). The frameworks included in this article are intended to provide guiding templates that can be refined by stakeholders at various levels. And, although the steps outlined imply a degree of linearity, it is essential to remember that implementing innovations and making the type of systemic changes that sustain them involve dynamic processes and require a flexible approach.

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