Each pendulum swing in the debate over how best to teach reading and writing calls for large-scale systemic changes. For the most part, however, the field of education has paid little attention to the full array of complexities involved in large-scale replication of curricular changes and other new directions for school-based interventions. Such neglect has contributed to the failure of many reforms. This article highlights a framework of general phases and specific steps for diffusion of major new approaches across a school district. The overlapping phases are seen as encompassing: (a) creating readiness, (b) initial implementation, (c) institutionalization, and (d) ongoing evolution. The discussion includes lessons learned in applying the framework.

Efforts to reform schools require much more than implementing demonstrations at a few sites. Improved approaches are only as good as a school district’s ability to develop and institutionalize them on a large scale. This process often is called diffusion, replication, roll out, or scale-up.

For the most part, education researchers and reformers have paid little attention to the complexities of 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 education reforms (see Replication and Program Services, Inc., 1993; Schorr, 1997; Slavin, 1996). Furthermore, leadership training has given short shrift to the topic of scale-up. Thus, it is not surprising that the pendulum swings that characterize shifts in the debate over how best to teach reading are not accompanied 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 in facilitating large-scale systemic change, and scheduling unrealistically short time frames for building capacity to accomplish desired institutional changes.

For many years, our work revolved mainly around developing demonstration programs. Major examples include the Early Assistance for Students and Families project (funded by the U.S. Department of Education; see Adelman & Taylor, 1993a), the restructuring of education support services in a large school district (see Adelman, 1996a, 1996b; Adelman & Taylor, 1997a), and the development of the Urban Learning Centers' model for comprehensive school reform (supported by the New American Schools Development Corporation, [NASDC]; see Urban Learning Center Model, 1995). Over the last few years, we have moved into the world of replicating new approaches to schooling on a large-scale. Confronted with the problems and processes of scale-up, we analyzed a broad range of psychological and organizational literature and delineated a working framework for scale-up (Adelman & Taylor, 1997b). The following presentation highlights that framework and discusses some major lessons learned from our recent efforts.

OVERVIEW OF PHASES AND MAJOR TASKS OF SCALING-UP

In reading the following, think about the best model around for how schools can improve student literacy. Assuming the model is reasonably cost-effective and that a school district wants to adopt/adapt it, the problem becomes one of how to replicate it at every school. For widespread school change to occur, a complex set of interventions is required. For this to happen effectively and efficiently, the interventions must be guided by a sophisticated scale-up model that addresses substantive organizational changes at multiple levels.

A scale-up model is a tool for systemic change. It addresses the question “How do we get from here to there?” Such a model is guided by a vision of organizational aims and is oriented toward results. We conceive scale-up as encompassing four overlapping phases: (a) creating readiness by enhancing a climate/culture for change, (b) initial implementation whereby replication is carried out in stages using a
FIGURE 1 Scale-up: phases and major tasks.

well-designed guidance and support infrastructure, (c) institutionalization by ensuring there is an infrastructure to maintain and enhance productive changes, and (d) ongoing evolution through use of mechanisms to improve quality and provide continuing support.

To initiate and guide prototype replication, a scale-up mechanism is needed. One way to conceive such a mechanism is in terms of a
scale-up project. Such a project provides a necessary organizational base and skilled personnel for disseminating a prototype, negotiating decisions about replication, and dispensing the expertise to facilitate scale-up. A scale-up project can dispense expertise by sending out a scale-up team consisting of project staff who, for designated periods of time, travel to replication sites. A core team of perhaps two-to-four project staff works closely with a site throughout the replication process. The team is augmented whenever a specialist is needed to assist with a specific element, such as new curricula, use of advanced technology, or restructuring of education support programs. Scaling-up a comprehensive prototype almost always requires phased-in change and the addition of temporary infrastructure mechanisms to facilitate changes.

Figure 1 briefly highlights specific tasks related to the four phases of scale-up. (For more on each phase, see Adelman and Taylor, 1997b). Each task requires careful planning based on sound intervention fundamentals (see Adelman & Taylor, 1994). This means paying special attention to the problem of the match as discussed in the first article in this issue.

**PHASE I: CREATING READINESS—ENHANCING THE CLIMATE FOR CHANGE**

In most organizations, mandated changes often lead to change in form rather than substance. Substantive systemic change requires patience and perseverance. Efforts to alter an organization’s culture evolve slowly in transaction with the specific organizational and programmatic changes. Early in the process, the emphasis is on creating an official and psychological climate for change, including overcoming institutionalized resistance, negative attitudes, and barriers to change. New attitudes, new working relationships, new skills all must be engendered, and negative reactions and dynamics must be addressed.

Creating readiness for reforms involves tasks designed to produce fundamental changes in the culture that characterizes schools. Substantive reform is most likely when high levels of positive energy among stakeholders can be mobilized and appropriately directed over extended periods of time. Thus, one of the first concerns is how to mobilize and direct the energy of a critical mass of participants to ensure readiness and commitment. This calls for proceeding in ways that establish and maintain an effective match with the motivation and capabilities of involved parties. In this respect, a review of the
literature clarifies the value of (a) a high level of policy and leadership commitment that is translated into an inspiring vision and appropriate resources (leadership, space, budget, time), (b) incentives for change, such as intrinsically valued outcomes, expectations for success, recognitions, rewards, (c) procedural options that reflect stakeholder strengths and from which those expected to implement change can select strategies they see as workable, (d) a willingness to establish an infrastructure and processes that facilitate change efforts, such as a governance mechanism that adopts strategies for improving organizational health, including one that enhances a sense of community, (e) use of change agents who are perceived as pragmatic by maintaining ideals while embracing practical solutions, (f) accomplishing change in stages and with realistic timelines, (g) providing feedback on progress, and (h) institutionalizing support mechanisms to maintain and evolve changes and to generate periodic renewal. There is an extensive literature in this area (e.g., Argyris, 1993; Barth, 1990; Bass, 1997; Bass & Avolio, 1994; Connor & Lake, 1988; Cunningham & Gresso, 1993; Donahoe, 1993; Elmore & Associates, 1990; Fullan & Stiegelbauer, 1991; Hatch, 1998; Heller, 1990; Hollander & Offermann, 1990; House, 1996; Lewis, 1989; Lieberman & Miller, 1990; Maton & Salem, 1995; Miles & Louis, 1990; Murphy, 1991; Newmann, 1993; Peterson, McCartney, & Elmore, 1996; Replication and Program Services, Inc., 1993; Sarason, 1990, 1996; Schlechty, 1990; Schmuck & Runkel, 1985; Smith & O’Day, 1991; Spillane, 1998; Waterman, 1987; Wehlage, Smith, & Lipman, 1992).

In terms of specific tasks associated with creating readiness, the first involves disseminating the prototype and pursuing activities to build interest and consensus for change. Decisions follow about specific sites for replication. Then, steps are taken to negotiate a policy framework and agreements for engagement. This is followed by activity to modify the institutional infrastructure at chosen sites to fit the prototype and address replication needs. All these tasks should be accomplished with a process that reflects understanding of the nature of the organization and its stakeholders, involves stakeholders in making substantive decisions and redesigning those mechanisms that constitute the organizational and programmatic infrastructure, clarifies personal relevance when identifying the potential benefits of change, elicits genuine public statements of commitment, and empowers and creates a sense of community.

Creating a climate for change requires appreciation of the roles played by vision and leadership for change, policy direction, support, safeguards for risk-taking, and infrastructure redesign. Each of these topics is discussed briefly below.
Vision and Leadership

Any major reform begins with a vision of what a desired new approach would look like and an understanding of how to facilitate necessary changes. One without the other is insufficient. Leaders have a triple burden as they attempt to improve literacy: the first is to ensure that substantive organizational and programmatic restructuring are considered; the second is to build consensus for change; finally, they must pursue effective implementation, including specific strategies for financing, establishing, maintaining, and enhancing productive changes.

Examples of key objectives at this stage include clarifying potential gains without creating unrealistic expectations, delineating costs without seriously dampening expectations about benefits, offering incentives that mesh with intrinsic motives, and conveying the degree to which a prototype can be adapted while emphasizing that certain facets are essential and nonnegotiable. A thread running through all this is the need to stimulate increasing interest or motivational readiness among a sufficient number of stakeholders. To clarify the point, successful change at any level of education restructuring requires the committed involvement of a critical mass of policy makers, staff, and parents. Almost any promising idea or practice for improving students' reading and writing performance may find a receptive audience among a small group. Many more individuals, however, are likely to remain politely unresponsive and reluctant to make changes, and some will be actively resistant. Thus, leaders are confronted with the task of shifting the attitudes of a significant proportion of those who appear reluctant and resistant.

The next step involves deciding about which sites to begin with. Criteria for making such decisions try to balance immediate concerns about a site's current level of readiness (including analyses of potential barriers) and the likelihood of success over the long run. For instance, in making initial judgements about the appropriateness of a potential site, we gather information about: How likely is it that a critical mass of decision makers will commit to allocating sufficient finances, personnel, time, and space? How likely is it that a critical mass of stakeholders will develop sufficient motivational readiness and appropriate levels of competence? With respect to the most influential stakeholders, will enough be supportive or at least sufficiently committed not to undermine the process? Do enough youngsters at a site fit the profile of students for whom the program model was designed? As these questions illustrate, most initial selection criteria reflect general considerations related to any diffusion process. More
Specific criteria emerge during the negotiation process. For example, a principal may be attracted by the idea of establishing a program that brings in volunteer reading tutors, but in subsequent discussions with teachers, union concerns may arise that require arbitration.

Policy

Substantive restructuring is unlikely without the adoption of new policies at all relevant jurisdictional levels (Spillane, 1998). Moreover, such policies must elevate desired reforms so that they are not seen simply as demonstrations, pilot projects, passing fads, or supplementary efforts. When reforms are not assigned a high priority, they tend to be treated in a marginalized manner (Center for Mental Health in Schools, 1998). This continues to be the fate of programs such as Head Start, Even Start, and many other approaches to enhancing school readiness and literacy. Relatedly, efforts must be made to revoke policies that preserve an unsatisfactory status quo (see critique of remedial reading programs by Dudley-Marling & Murphy, 1997).

Lasting reform requires processes that ensure informed commitment, ownership, and on-going support on the part of policy makers. This involves strategies to create interest and formalize agreements about fundamental changes. Local ownership is established through solid policy commitments, well-designed infrastructure mechanisms, allocation of adequate resources (e.g., finances, personnel, space, equipment) to operationalize the policy, and restructuring of time to ensure staff involvement in adapting the prototype to the setting. We find three steps are essential: (a) building on introductory presentations to provide indepth information and understanding as a basis for establishing consensus, (b) negotiation of a policy framework and a set of agreements for engagement, including a realistic budget, and (c) informed and voluntary ratification of agreements by legitimate representatives of all major stakeholders.

For any program, there are principles, components, elements, and standards that define its essence and thus must be agreed to as a first condition for engagement. Equally important are fundamental scale-up considerations off-line nonnegotiable, such as the need for temporary mechanisms to facilitate change. Once essentials are agreed on, all other matters are negotiable.

Informed commitment is strengthened and operationalized through negotiating formal agreements at each jurisdictional level and among various stakeholders. Policy statements articulate the commitment to
a program's essence. Memoranda of understanding and contracts specify agreements about such matters as funding sources, resource appropriations, personnel functions, incentives and safeguards for risk-taking, stakeholder development, immediate and long-term commitments and timelines, accountability procedures, and so forth.

Scale-up is aided when the decision to proceed is ratified by sanctioned representatives of stakeholder groups. Developing and negotiating policies, contracts, and other formal agreements is a complex business. We find that addressing the many logistics and legalities requires extensive involvement of a small number of authorized and well-informed stakeholder representatives. Thus, in pursuing these tasks, our commitment to include everyone moves from a town hall approach to a representative democratic process with enfranchised representatives reporting back frequently to their constituencies. At first, endorsement is in principle; over time, it is manifested through sustained support. When ratification reflects effective consensus building, scale-up efforts benefit from a broad base of informed commitment, ownership, and active sponsorship. These attributes are essential in ensuring requisite support and protections for those who must bear the burden of learning new ways and who risk dips in performance and productivity while doing so.

**Redesigning Infrastructure**

After agreements are ratified, a scale-up team can begin its work (again see Figure 1). A central challenge at every jurisdictional level is redesign of regular mechanisms and processes used to make and implement decisions. These modifications ensure ownership, support, participation, and address specific concerns associated with scale-up.

Five fundamental facets of the ongoing infrastructure of schools that are the focus of redesign are (a) governance, (b) planning and implementation associated with specific organizational and program objectives, (c) coordination and integration to ensure cohesive functioning, (d) daily leadership, and (e) communication and information management. A common example of the need for infrastructure modification is seen in the trend to increase school stakeholders' collaboration, participation, and influence. One implication is that governance mechanisms will be altered to redistribute power. A major problem, of course, is how to empower additional stakeholder groups without disempowering those who have essential responsibilities and abilities related to the educational enterprise. In addition, it is one thing to offer “partnerships” to stakeholders such as parents, students, staff, and community agency representatives; it
is another to create conditions that allow for effective participation. One such condition involves translating capacity building activity into comprehensive programs for stakeholder development.

The necessity of all this can be appreciated by thinking about introducing a comprehensive approach for improving student literacy (Stringfield, Ross, & Smith, 1996). Such approaches involve major systemic changes that encompass intensive partnerships with parents (or their surrogates) and with various entities in the community, such as libraries, youth development programs, businesses, the faith community, and so forth. Substantive partnerships require a true sharing of leadership, blending of resources, and leadership training for professionals and nonprofessionals alike. In communities where many parents have little or no connection to the school, major outreach efforts are inevitable prerequisites to increasing home involvement in school reform. Parent outreach, of course, has not been very successful in many neighborhoods. Our experience suggests that a necessary first step in most cases is to offer programs and services that assist the family in meeting its most pressing needs. Furthermore, there is the matter of building parent competence to deal with planning reforms and restructuring schools, and for low income families, there is a need to find ways to pay parents for the time they devote to serving on governance and other committees.

Time is one of the most critical elements determining the success of scale-up. Even if a prototype doesn’t call for restructuring the school day, the scale-up process does. Substantial blocks of time are needed for stakeholder capacity building and for individual and collective planning (National Education Commission on Time and Learning, 1994). Particularly critical is the need for freeing-up teachers to learn new approaches. For example, efforts to make important revisions in literacy programs seem consistently undermined by not providing enough time during the school day for the mentoring of teachers and by the difficulty of carving out sufficient time to teach parents how to help their children. Clearly, a nonnegotiable condition for engagement is a realistic plan for ensuring time to plan and build capacity.

Lessons Learned

Complex interventions, of course, are seldom implemented in a completely planned and linear manner. The many practical and unforeseen events that arise require flexible problem-solving. Articulation of a scale-up model can guide planning, but those facilitating the
process must be prepared to capitalize on every opportunity that can move the process ahead.

Among the most fundamental lessons learned in carrying out Phase 1 has been the tendency of all parties to set actions into motion without taking sufficient time to lay the foundation needed for substantive change. In marketing new ideas, it is tempting to accentuate their promising attributes and minimize complications. In negotiating agreements, policy makers at a school site frequently are asked simply for a go-ahead rather than for their informed commitment. Sometimes they assent mainly to get extra resources; sometimes they are motivated by a desire to be seen by constituents as doing something to improve the school. This all tends to produce pressures for premature implementation that results in the form rather than the substance of change, especially when administrators are under the gun of political accountability measures that make unrealistic demands for quick and dramatic results in students’ reading scores.

Although formulation of policy and related agreements take considerable time and other resources, their importance cannot be overemphasized. Failure to establish and successfully maintain substantive reforms in schools probably is attributable in great measure to proceeding without strong and clear policy support.

Another unfortunate trend we have found is the omission of in-depth planning for ongoing capacity building for change agents and team members. Mechanisms function only as well as the personnel who operate them. Such personnel must be recruited and developed in ways that ensure appropriate motivation and capability, and sufficient time must be redeployed so they can learn and carry out new functions effectively (Peterson, Mccarthey, & Elmore, 1996). All changes require constant care and feeding. Those who steer the process must be motivated and competent, not just initially but over time. The complexity of systemic change requires close monitoring of mechanisms and immediate follow-up to address problems. In particular, it means providing continuous, personalized guidance and support to enhance knowledge and skills and counter anxiety, frustration, and other stressors. To these ends, adequate resource support must be provided (time, space, materials, equipment), opportunities must be available for increasing ability and generating a sense of renewed mission, and personnel turnover must be addressed quickly. All stakeholders can benefit from efforts designed to increase levels of competence and enhance motivation for working together. Such efforts encompass four stages of stakeholder development: orientation, foundation-building, capacity-building, and continuing education.
There is no simple solution to the chronic problem of providing time for creating readiness, building capacity, and planning. Indeed, restructuring time represents one of the most difficult scale-up problems. Examples of how the problem might be addressed include freeing up staff by establishing opportunities for students to spend time pursuing activities such as music, art, and sports with specialists or supervised by aides and community volunteers. Alternatively, school might start later or end earlier on a given day. As these examples suggest, any approach will be controversial, but if the problem is not addressed satisfactorily, successful replication of comprehensive prototypes is unlikely.

**PHASE II: INITIAL IMPLEMENTATION OF A PROTOTYPE**

Initial implementation involves adapting and phasing-in a program with well-designed guidance and support. If there is anything certain about efforts to replicate a prototype, it is that the process is stressful. Some of the stress arises from the nature of the program; some is inherent in the process of organizational change. Coalitions must be developed, new working relationships established, disruptive rumors and information overload countered, and interpersonal conflicts resolved. Short-term frustrations must be kept in perspective vis-à-vis the reform vision. To help deal with all this, temporary mechanisms are added to the organizational infrastructure. They include: (a) a site-based steering mechanism to guide and support replication; (b) a change agent from the scale-up team working with site stakeholders on a change team to facilitate coalition building, problem solving, and conflict resolution; and (c) mentors and coaches to model and teach elements of the prototype. These structures are created to facilitate replication, and some are assimilated into a site’s infrastructure at the end of the initial implementation phase to support institutionalization and ongoing evolution.

A scale-up team and steering group work at a site with the school’s leadership, specific planning groups, and other stakeholders to formulate phase-in plans, steer program development, and generally provide guidance and support for change. Two major facets of this work are delineating a sequence for introducing major program elements and outlining strategies to facilitate implementation. Particular attention is given to how to start, with special emphasis on specifying structures and resources for guidance and support. For
instance, in restructuring to better address barriers to learning, the first steps at a school site involve creating processes to map, analyze, coordinate, and redeploy existing resources. Special change mechanisms such as an organization facilitator and a resource coordinating team are created to guide and support the activity (Adelman, 1993, 1996a, 1996b; Adelman & Taylor, 1997a, 1997b, 1998).

Throughout this phase, formative evaluation procedures are established to provide feedback for program development. As noted above, effective efforts to “reinvent” schools require ensuring that all involved have the time to develop and institutionalize a sound program and that they are not penalized for unavoidable missteps. As a prototype is phased-in, evaluation must not be thought of in terms of accountability. Major systemic changes to improve literacy can take years to develop. Outcome effectiveness is demonstrated after the program is in place. The purpose of evaluation at this stage is to guide revision and fine-tuning of processes. Formative evaluations gather and analyze information relevant to changes in planning processes, governance structures, and policies and resources; they also focus on implementation strategies and barriers, program organization and staffing, and initial outcomes. Are teachers mastering the new curricula for literacy? Is there increased student engagement in reading? Are parents involved in supporting reading at home? If things are not progressing satisfactorily, why not? What’s the downside of the new approach?

Well-designed organizational support and guidance is needed to enhance productivity, minimize problems, and accommodate individual differences. This involves various forms of capacity building and personalized day-by-day facilitation. Intensive coaching with some follow-up consultation, for instance, are key processes; so are mentorship and technical assistance. Continuing education provides a critical vehicle for enhancing productive changes, generating renewal, and countering burnout. As new stakeholders arrive, technological tools can be particularly useful in helping them catch up. All this activity not only builds capacity, but can foster networking and other forms of task-related, social, and personal support, as well as provide a wide range of enrichment opportunities that enhance morale.

If the steps discussed to this point are done well, a sound foundation for initial implementation should be in place. This initial phase-in period can, however, consume considerable effort, create special problems, and may yield a temporary drop in some performance indicators. Good day-by-day facilitation aims at minimizing such negative impact by effectively addressing stakeholder motivation and capability and overcoming barriers to productive working relationships.
Lessons Learned

Failure to take sufficient time to create readiness (Phase 1) can result in implementing the form rather than the substance of a prototype. For example, we find that change agents frequently are sent into schools before essential policy support is enacted and before school leaders have assimilated and decided to support reforms. Teams are convened to assist with reforms (plan, coordinate, develop new approaches), but the absence of supportive policy means substantive changes are not accomplished. As a result, the initial motivation of many key team members wanes and other counterproductive dynamics arise. All of this seems inevitable when initial implementation proceeds without adequate policy support.

Even in situations where sufficient readiness is created, difficulties frequently arise due to a failure to keep enough stakeholders consistently moving in the direction of desired outcomes. Comprehensive change is usually achieved only when fairly high levels of positive energy can be mobilized over extended periods of time among a critical mass of stakeholders, sustained energy is appropriately directed, the process is supported with ongoing and well-conceived capacity building, and individuals are not pushed beyond their capabilities. And because low and negative motivation are related to resistance to change and poor functioning, matching motivation is a first-order consideration. That is, scale-up efforts must use strategies designed to mobilize and maintain proactive effort and overcome barriers to working relationships. As in personalizing instruction, approximating a good motivational fit also requires matching capabilities, such as starting with fewer elements at sites at which resources are limited and accounting for variability in stakeholders’ competence. Over and over, we find too little attention is paid to these matters. The result is failure to create an “environment” that mobilizes, directs, and then maintains stakeholder involvement.

As with students, the problem can be conceived as that of maintaining an appropriate match between the demands of the situation and individual motivation and capabilities. In this respect, we think the construct of personalization offers a concept around which to organize thinking about facilitating change. As stressed in the first article in this issue, personalization calls for systematically planning and implementing processes focused not only on knowledge and skills, but on attitudes. In particular, it emphasizes the importance of a primary and constant focus on ensuring positive attitudes. Mobilization probably is best facilitated when procedures are perceived by individuals as good ways to reach desired outcomes. This requires
processes that can instigate and enhance an individual's perceptions of valued opportunities, choice and control, accomplishment, and relatedness to others. Even if a task isn't enjoyable, expectation of feeling some sense of satisfaction related to process or outcome can be a powerful intrinsic factor motivating individual behavior. Task persistence, for example, can be facilitated by the expectation that one will feel competent, self-determining, or more closely connected to others. From this perspective, ensuring that individuals have valued options, a meaningful role in decision making, feedback that emphasizes progress toward desired outcomes, and positive working relationships are among the most basic facilitation strategies (Adelman & Taylor, 1993b, 1994; Deci & Ryan, 1985).

One other initial implementation problem that often arises is difficulty in establishing mechanisms to facilitate productive working relationships and identify and deal with problems quickly. For example, it is expected that change agents will encounter many instances of individual resistance and apathy, interpersonal conflicts and resentments (including "us vs. them" dynamics), rumors that overemphasize the negative and underestimate the positive, and individuals who are frequent faultfinders. Such problems seriously impede effective replication. The roots of some of these problems often are present at a site prior to scale-up; change simply offers a new focus and perhaps magnifies troubling matters. Other problems are a direct product of the activities and relationships that the scale-up process engenders. Given the inevitability of such problems, building and maintaining working relationships need to be among the most basic concerns for those who have responsibility for scale-up. In particular, considerable attention must be paid to enhancing the motivational readiness and capability of those who are to work together and ensure there is an appropriate infrastructure to guide and support working relationships. Proactively, this requires problem prevention mechanisms that help create an atmosphere where defensiveness is curtailed and positive rapport is engendered. The point is to enhance attitudes, knowledge, and skills that foster interpersonal connections and a sense of community. Reactively, the emphasis is on problem solving, resolving conflict, and providing ongoing support to rebuild relationships. Policies must encourage problem-solving-oriented critiques, safeguards that protect those making changes, appreciation for effort, and celebration of progress. We find that everyone understands such matters, but the culture at many school sites is more attuned to problem naming and analyzing than to anticipating, preventing, and solving problems that arise around working relationships.
Those responsible for systemic change need to spend as much time as necessary ensuring that a school’s infrastructure is ready to prevent and ameliorate problems. Special attention must be paid to ensuring that problem solving mechanisms and communication processes are in place and properly staffed and that stakeholders are well informed about how to use the procedures. Furthermore, some stakeholders may have to be encouraged to interact in ways that convey genuine empathy, warmth, and mutual regard and respect with a view to creating and maintaining a positive working climate and a psychological sense of community.

At times, we find it necessary to target a specific problem and designated persons. In some instances, rather simple strategies are effective. For example, most motivated individuals can be directly taught ways to improve understanding and communication and avoid or resolve conflicts that interfere with working relationships. In other instances, however, significant remedial action is necessary, as when overcoming barriers to a working relationship involves countering negative attitudes. Helpful in this regard are analyses, such as that by Sue and Zane (1987), that suggest how to demonstrate that something of value can be gained from individuals working together and how to establish each participant’s credibility (e.g., by maximizing task-focus and positive outcomes).

PHASE III: INSTITUTIONALIZING THE PROTOTYPE

Maintaining and enhancing changes can be as difficult as making them in the first place. The history of education reform is one of failure to foster promising prototypes in substantive ways and over an extended period of times (Tyack & Cuban, 1995). Institutionalizing a prototype entails ensuring that the organization assumes long-term ownership and that there is a blueprint for countering forces that can erode the changes. Moreover, institutionalization is more than a technical process. It requires assimilation of and ongoing adherence to the values inherent in the prototype’s underlying rationale. The focus, of course, is not just on maintenance; the point is to move forward by enhancing productive changes and generating a sense of renewal as needed. Critical in all this are specific plans that guarantee ongoing and enhanced leadership and delineate ways in which planning, implementation, coordination, and continuing education mechanisms are maintained.

Some Major Tasks

Whose responsibility is it to advocate for maintaining and evolving a
replicated prototype for improving literacy? As problems arise, whose responsibility is it to lead the way in resolving them? Leadership is the key here, by both official leaders, such as administrators, mentor staff, union chapter chairs, and elected parent representatives, as well as natural leaders, such as reading and writing teachers. Obviously, official and natural leaders are not mutually exclusive groups. At this phase, both types of leadership are essential to ensure a broad enough base for ongoing advocacy, problem solving, enhancement, and renewal. Official leaders provide a legitimate power base as various interests compete for the organization’s limited resources, and they play a key role in ensuring that the contributions of natural leaders are recognized and rewarded.

Maintenance and enhancement require that the organization’s governance body assumes ownership and program advocacy, such as taking over the temporary steering group’s functions, addressing ongoing policy and long-range planning concerns, and maintaining financial support. The foundation for such ownership is laid during the readiness phase. Each element becomes the organization’s property as it is established during initial implementation. The official deed of ownership is transferred as soon as the prototype is in place.

Ownership, however, is no guarantee of institutionalization. Various forces that can erode reforms are always at work. For instance, teams at a site experience turnover; problems with communication and sharing of resources are chronic; competing interests and the attractiveness of moving on to something new pull attention and resources to other activity. To minimize such problems, steps must be taken to identify and solve them as quickly as is feasible. This requires someone who has the time, energy, and expertise to meet periodically with stakeholders to anticipate and ameliorate threats to a prototype’s integrity.

Over time, mechanisms for planning, implementation, and coordination are maintained by ensuring the activity is an official part of the infrastructure, has appropriate leadership, and is effectively supported. Anyone who has worked on a school-based team to improve a literacy program knows there must be a critical mass of team members so that the work load is manageable and a broad base of involvement is ensured. Also essential are adequate resources, including time to learn the role and time to perform the functions, reasonably interesting tasks, technical support for problem solving, recognition and rewards for contributions, immediate replacement when someone leaves, continuing education to enhance team functioning, and so forth. Without serious attention to such matters, the teams’ morale and motivation will wane.
Lessons Learned

Newly institutionalized approaches are seriously jeopardized in the absence of dedicated, ongoing capacity-building. Of particular importance are ways to rapidly and effectively assimilate new arrivals at a school (staff, students, families). This is a major concern at sites with considerable turnover or growth. At such sites, the majority of those initially involved in implementing a new approach may be gone within a period of two to three years. Whatever the mobility rate, it is essential to design and maintain transition programs for new arrivals. Initial welcoming and introductory orientations, of course, must be followed-up with ongoing support systems and intensive capacity building related to understanding and valuing the approaches the school has adopted. We find that all this is essential not only to maintain what has been adopted, but also can contribute to establishing schools as caring environments.

PHASE IV: ONGOING EVOLUTION

Ongoing evolution of organizations and programs is the product of efforts to account for accomplishments, deal with changing times and conditions, incorporate new knowledge, and create a sense of renewal as the excitement of newness wears off and the demands of change sap energy. As suggested already, in part, vigor and direction can be maintained through continuing education, especially exposure to ideas that suggest a range of ways for evolving a program. As the following discussion indicates, ongoing evolution also is fostered by evaluation designed to document accomplishments and provide feedback designed to improve quality.

Increased concern over accountability has advanced the way evaluation is conceived (Posavac & Carey, 1989; Rossi & Freeman, 1989; Scriven, 1993; Sechrest & Figueredo, 1993; Shadish Jr., Cook, & Leviton, 1991; Stake, 1967, 1976; Stufflebeam & Webster, 1983; Weiss, 1995). At the same time, social and political forces have literally shaped the whole enterprise and, in the process, have narrowed the way professionals, clients, policymakers, underwriters, and the general public think about program evaluation. A prevailing cry is for specific evidence of effectiveness. For schools, this means immediate gains in literacy as measured by achievement tests. Although understandable in light of the unfilled promise of so many programs and the insatiable demands on limited public finances, such simplistically conceived accountability demands ignore the complexities of developing and scaling-up major reforms.
Formative and Summative Evaluation

Evaluation of a prototype involves more than determining efficacy for students. Broadly stated, it encompasses concerns about how to expand the focus of evaluative research not only to contribute to improving practice, but also to aid in evolving practice and policy (General Accounting Office, 1989; Lyon & Moats, 1997). To facilitate program development and organizational change, the primary orientation for evaluation in the early phases is formative. It is especially focused on data gathering and analyses that can help improve procedures. Most of what is written about educational and psychosocial intervention, however, is oriented to summative evaluation and measuring outcomes for individuals, such as improved reading achievement scores. Replicating approaches to improve literacy involve not only changing individuals but changing organizations and systems. Thus, both individuals and systems must be evaluated.

All this presumes appropriate mechanisms to provide and analyze essential information. To these ends, a scale-up staff can help establish an evaluation team and capacity building that prepares a school to conduct evaluation that enhances reforms. The immediate focus is on successful program replication; ultimately, of course, the emphasis must be on student outcomes.

Pursuing Results

Due to the increased interest in accountability, many complex aims are broken down into specific objectives. Indeed, short-range objectives stated in measurable terms generally assume a central role in planning. However, short-range objectives are not ends in themselves. They are a small part of a particular goal and aim and sometimes are prerequisites for moving on to a goal. It is essential not to lose sight of the fact that many specific objectives are relatively small, unrepresentative, and often unimportant segments of the most valued aims that society has for its citizens and citizens have for themselves.

The problem is well exemplified by the narrow focus found in reviews, analyses, and reanalyses of data on early education (e.g., see Albee & Gullotta, 1997; Bond & Compas, 1989; Dryfoos, 1990; Durlak, 1995; Elias, 1997; Mitchell, Seligson, & Marx, 1989; Schorr, 1988; Slavin, Karweit, & Madden, 1989; Weissberg, Gullotta, Hamptom, Ryan, & Adams, 1997). As such work demonstrates, overemphasis on evaluating the efficacy of underdeveloped prototypes draws resources away from formative evaluation.
With specific respect to scale-up, the first accomplishment is the replication itself: Have all facets been implemented? How completely has each been implemented? At how many locations? The next set of results are any indications of progress for students, such as improvements in attitudes toward school, health, attendance, behavior, and academic achievement. A final set of evaluation concerns is the degree to which student outcomes approximate societal standards.

**Lessons Learned**

The process of evaluating results is costly in terms of financial investment, the negative psychological impact on those evaluated, and the ways it can inappropriately reshape new approaches. Cost-effective outcomes cannot be achieved in the absence of effective prototype development and research. Premature efforts to carry out comprehensive summative evaluations clearly are not cost-effective. Any reading and writing program will show poor results if it is evaluated before teachers have mastered its application. None of this, of course, is an argument against evaluating results. Rather, it is meant to underscore concerns and encourage greater attention to addressing them.

Once a prototype is established, care must be taken to avoid developing outcome evaluation as an adversarial process. Due to the political realities related to accountability, one of the most perplexing facets to negotiate is the time frame for summative evaluation. The more complex the prototype, the longer it takes and the costlier it is to implement and evaluate. Schools usually want quick processes and results and, of course, rarely can afford costly innovations or lengthy diffusion activity. Compromises are inevitable but must be arrived at with great care so as not to undermine the substance of proposed changes.

The psychology of evaluation suggests that an overemphasis on accountability tends to produce negative reactions. One possible way to counter this may be to conceive evaluation as a way for every stakeholder to self-evaluate as a basis for quality improvement and as a way of getting credit for all that is accomplished. Unfortunately, as accountability pressures increase, we find that replication of prototypes are guided more by what can be measured than by long-range aims. That is, demands for immediate accountability reshape practices so that the emphasis shifts to immediate and readily measured objectives and away from fundamental purposes. Over time, this inappropriately leads to radical revision of the underlying rationale for a prototype.
CONCLUDING COMMENTS

Those who set out to change schools and schooling 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 scale-up processes. Clearly, it is time to correct this deficiency. The ideas presented in this article are meant to stimulate work on the problem and thereby to advance the cause of educational reform.

Finally, in fairness to those who labor for educational reform, we all must remember that the quality of schooling, family life, and community functioning spirals up or down as a function of the quality of the ongoing transactions among each. Thus, scale-up efforts related to educational reform must take place within the context of a political agenda that addresses ways to strengthen the family and community infrastructure through strategies that enhance economic opportunity, adult literacy, and so forth. What we need are policies that develop, demonstrate, and scale-up comprehensive, multifaceted, integrated approaches that can effectively address barriers to development, learning, and teaching.

REFERENCES


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