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Prevention and Promotion:

Implementing Programs

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OPENING EXERCISE: LESSONS
LEARNED FROM SUCCESS

It is common to watch TV footage of the latest famine or epidemic somewhere that seems far away and conclude that such problems are too big, that attempting to prevent them is a waste of money, that nothing can be done. Yet many professionals in public health and other fields disagree. The lessons of history support their view.

Levine (2004), in a story published in the *Newark Star-Ledger* for World AIDS Day, assembled a list of some of the prevention successes in the history of public health.

- A global immunization effort, led by the World Health Organization, ended in 1977 with the elimination of smallpox. That outcome probably could have been achieved a decade earlier with money and effort at the right time; in the meantime, many died unnecessarily.

- Focused immunization efforts reduced cases of measles among children in seven southern African nations from 60,000 in 1996 to 117 in 2000.

- In Sri Lanka, a government commitment to "safe motherhood" services has reduced maternal mortality to less than 5% of its former incidence level.

- Across 11 countries in West Africa, a public health program run almost exclusively by African professionals has prevented hundreds of thousands of cases of blindness.

- A national campaign in Egypt that promoted a simple treatment for dehydration (mixing clean water with sugar and salt) helped reduce the number of infant deaths from diarrhea by 82 per cent.

- In Thailand, a government campaign that required sex workers to use condoms led to an 80 per cent reduction in HIV cases, preventing nearly 200,000 new cases.

- In 1985, governments in Latin American and the Caribbean began a major effort to vaccinate every child against polio. This followed earlier, similar large-scale campaigns in developed countries. Today, polio is no longer a threat in the Western Hemisphere.

- In 1990, Poland had the highest rate of tobacco consumption in the world. A combination of health education and stringent tobacco legislation there has prevented 10,000 deaths a year, reduced lung cancer rates by as much as 30%, and boosted the average life expectancy of Polish men by four years.

- The costs of preventing these and other conditions are far less than the costs of treating them, or of dealing with the social disruption and losses they can cause.

- Key elements in such successes have been consensus on the best approaches, sustained funding at adequate levels, political and social leadership, technological innovation, effective delivery of treatments and education, good local management of prevention programs, and ongoing monitoring of program effectiveness. These elements can lead to successes even in countries with very little money. In many successes, international agencies, national governments, private corporations and local professionals and citizens collaborated. (Levine, 2004, pp. 1, 8)

What are your personal reactions to these points? What lessons can we draw from them?

Knowledge from prevention research does little good if it is not implemented. Even if it is implemented, it must be carried out with high quality. Even that is not enough. To have an impact, prevention efforts must be widespread. And they must last. Levine shows that we often know enough to accomplish a great deal, even under highly unfavorable conditions. She provides examples of how such substantial problems as smallpox, polio, maternal mortality, and tobacco use were overcome to extraordinary degrees by focusing on what it took to apply existing knowledge in order to bring it into practice.

In fact, community and preventive psychologists have learned a great deal about the art and science of implementing preventive efforts. Bringing good ideas and sound procedures of the kind you read about in Chapters 9 and 10

into high-quality, enduring practice is possible. The challenge can be likened to the difference between reviewing for a test in the library and actually taking the test, or the difference between pitching in the bullpen and facing live batters in a stadium with a huge crowd roaring on every pitch. Performance in the practice situation does not always match what can be demonstrated under real-world conditions. See what other examples you can think of in which you have noticed a difference in performance under real-world versus more protected conditions. How could those differences be bridged or overcome? Now you can better see why this chapter is an important part of community psychology's understanding of prevention and promotion.

Community psychology has been at the forefront of looking at what happens when a community brings a social action program into a new setting—whether the goals are promoting competence, preventing problems, treating existing difficulties, or a combination of these. This topic integrates personality theory, learning theory, clinical, social, health, environmental, and school psychology, community mental health, public health, and, of course, community psychology. Implementation represents a crucial frontier between action and research.

WHAT REALLY HAPPENS WHEN PREVENTION/ PROMOTION IS CARRIED OUT IN COMMUNITIES?

> "What is seen often is not real;
> what is real often is not seen."

How does this saying apply to prevention and promotion initiatives? Articles in research journals devoted to these topics describe well-funded demonstration projects involving committed and well-trained staff, occurring in settings that value innovation, supported with a variety of resources, and studied in detail by program evaluation researchers. The unseen is what happens in community contexts: classrooms, Head Start centers, after-school youth groups, workplaces, senior citizen programs, community-based drug abuse prevention coalitions, and other settings where there is rarely an experimental design in place and no one is available to chronicle what actually happens towards reaching prevention/ promotion goals. (See Primavera, 2004, for an example of the importance of local processes and relationships in a community program.)

What else does the saying imply? What does it say to those who want to bring programs into their home settings? From a community psychology perspective, there must be an ecological match, or fit, between the context in which a program has been demonstrated and the context of its future application. Programs developed and studied under conditions of heavy funding, motivation, and resources rarely find their future environments to be similarly endowed. As a result, many failures to replicate "successful" efforts are reported in the literature.

Yet some local settings contain programs that could be quite valuable in other places. However, documentation of how these programs operate may be lacking, inadequate, or not widely distributed. In the previous chapters we reviewed

various types of prevention/promotion programs with sound empirical evidence for their effectiveness. In this chapter we describe ways to close the gap between rhetoric and reality, moving from images held out in journal articles, demonstration projects, and well-funded program initiatives toward what will endure in the day-to-day grind of settings with limited resources, such as those in your neighborhood. We seek answers to this question: What can community psychology do to make sure that what we know about prevention/promotion is actually used in communities?

In this chapter we discuss how prevention and promotion initiatives really are complex *operator-dependent innovations*. That is a fancy way of saying that implementing them consistently and with high quality is difficult because they are greatly influenced by numerous critical decisions made by the people who carry them out. First, we ask whether available prevention/promotion interventions are widely implemented effectively and find the answer is often "no." Second, we describe some reasons why this is so, involving ecological contexts and characteristics of prevention initiatives. Third, we present issues to be considered when planning and implementing prevention programs, especially their relationship to setting constraints and resources. Fourth, we propose an analogy to a conductor and orchestra and present a conductor's guide to implementation. We then illustrate that analogy with a description of a two-decades-long process of implementation of one prevention/promotion program. We conclude with thoughts about the current and future importance of attending to implementation issues.

HAVE WELL-IMPLEMENTED PREVENTION/ PROMOTION INNOVATIONS BEEN SUSTAINED OVER TIME?

We illustrate challenges for implementing prevention and promotion approaches with a recent study of the operation of such approaches in schools. As you learned in Chapter 10, the evidence is clear that school-based prevention/promotion innovations can provide children with skills, supportive environments, and positive life opportunities that lessen their risk for a variety of health-compromising actions. Much has been learned about how to implement them effectively, as we have discussed. The next big question for community psychology to address is: Once programs are well implemented, to what extent are they sustained and what factors seem to influence sustainability?

The CASEL Model Site Sustainability Study

In 1997, the Collaborative for Academic, Social, and Emotional Learning (www.CASEL.org) published *Promoting Social and Emotional Learning: Guidelines for Educators* (Elias, Zins et al., 1997). Part of this book contained the results of site visits around the United States designed to identify model sites of schools carrying out high-quality, empirically supported prevention-oriented social-emotional learning (SEL) programs.

TABLE 11.1 Characteristics of Well-Implemented, Sustained Prevention Programs

1. **Active administrative support.** This provides long-term continuity in leadership and the ongoing, high-quality involvement of staff, parents, and community.

2. **Ongoing training and professional development.** This includes staff training, involvement of committed, skillful teachers as role models, and peer support among teams of teachers.

3. **Integration of the program into the school.** This includes institutionalizing the program into school policy, everyday practices, and budget, making the program a routine part of the school.

Five years later, CASEL asked: How many sites were still functioning as model sites? To what extent do they embody features that current research suggests are characteristic of long-lasting programs implemented with fidelity? The theoretical framework used to examine the sustainability of these model sites focused on three elements: the motivation and readiness of the school for the program, the resources available for program implementation, and validation of the program's benefits by key decision makers. Twenty-one interviews were conducted, representing 14 programs in the United States. The interviews covered current program components and the history of changes since inception of the SEL program, satisfaction with the program and changes over time, and factors that sustained (or impeded) the program over time.

The results are summarized in Table 11.1. Six programs were clearly Sustained, and four had retreated significantly in status or quality (Detached or Discontinued). Four other programs were in a status designated as Developing, implying that active steps were being taken to restore them to their prior status. Clearly, not every program was sustainable. Three main areas differentiated Sustained and Developing programs, which sustained their high level of implementation, from those that declined (Elias & Kamarinos, 2003):

First, active administrative support for the program was critical for organizational commitment: for adoption and sustaining of the program by teachers and other staff, for obtaining money and other resources, and for explaining the program to parents and community members. When administrative turnover occurred, programs proceeded with minimal disruption, usually because program developers engaged new administrators and offered program consultation to school staff. Sustainability can take a long-term emotional toll on even its most committed members if the program is in a constant state of reinvention or uncertainty.

Second, sustained implementation required ongoing professional development about the program among teams of committed staff (teachers and others). This required some staff to become program advocates and role models. Sustainability is more likely when professional development is continual and implementers have a constantly deepening understanding of the theoretical principles and pedagogy upon which the program is based. When teams of implementers with a deep commitment to the program work together, they can often maintain

program momentum even during times of turnover. Most important, deep understanding of program principles allows implementers to adapt programs in response to changing circumstances yet maintain key program elements.

Third, sustained programs were integrated with other courses and into the mainstream of the school day and routine. This included use of the program in reading, health, and social studies as well as in school assemblies, school discipline and resolution of conflicts among students, and expectations for playground and lunchroom behavior. Integration takes place over a period of years and includes the program's becoming a regular part of the school budget; external funding is often available only for a few years or can change over time.

These findings converge with other studies. McLaughlin and Mitra (2001) analyzed the staying power of school reforms over a five-year period and found that deep learning of theory and planned, proactive training of staff and administrators were important factors. Initial support for an innovation by administration and staff was less important than predicted when the innovation had a clear, feasible path of implementation and its benefits were soon apparent. Lessons about sustaining innovations in schools are similar to those in other workplaces. Administrative energy and direction are essential for sustainability, but overcoming turnover requires an educated, committed workforce. Administrative commitment, deep involvement of the workforce in ongoing change (especially at a face-to-face microsystem level), and innovations that address integral parts of the organization's mission all foster sustainability (Elias & Kamarinos, 2003).

An Action Research Perspective on Program Development

Lewin's concept of action research is a guiding framework for implementing prevention/promotion programs in school and community settings (see Chapters 2, 3, 4, and 14). Action research involves testing theories and methods by putting them into practice, evaluating their impact, and using the results to refine future theory, method, and practice. Action research is seen as involving ongoing cycles of problem analysis, innovation (intervention) design, field trials, and innovation diffusion (dissemination), leading to ever more precise variations and targeting of programs to recipient populations and settings (Price & Smith, 1985). The entire model is cyclical because ongoing monitoring of problem areas yields information about whether or not the program is having a significant impact. This information leads to further cycles of developing, evaluating, and refining prevention innovations. Important models for this process include Fairweather's Experimental Social Innovation and Dissemination (ESID) approach (Fairweather, 1967; Hazel & Onanga, 2003) and the prevention science approach embodied in the IOM Report (Mrazek & Haggerty, 1994).

Rossi (1978) addressed the issue of how a program evolves from its beginnings to having real public health impact. He believed the central question is how the program operates when carried out by agents other than the developers. The process of going from original development of an innovation to its widespread implementation is sometimes referred to as **scaling up** (Schorr, 1997). That process represents the core of this chapter. Combining this work with a

community psychology perspective, four stages of program development and implementation can be identified.

- **Experimental development:** A program demonstrates its effectiveness under small-scale, optimal, highly controlled conditions compared to a control group.

- **Technological application:** A program demonstrates effectiveness under real-world conditions, similar to the conditions for which it is eventually intended but still under the guidance of its developers.

- **Diffusion of innovation:** A program is adopted by other organizations or communities and demonstrates effectiveness under real-world conditions when not under the direct scrutiny and guidance of its developers.

- **Widespread implementation:** The diffusion stage brings the program to a few communities only. Implementation becomes widespread when a program continues to show its effectiveness in a wide variety of settings and is transferred from its developers to new implementers, who in turn conduct further program diffusion. The program has widespread impact only when this final stage occurs.

The challenge of widespread implementation can be illustrated in the following example. A developer of innovative science education programs at the American Association for the Advancement of Science noted that he gets calls, requests, letters, and the like from all over the country from people who are excited about the work of his innovative project and want his help to implement it in their communities. He tells them he can't. Why? Because "there are more of you than there are of us" (Rutherford in Olson, 1994, p. 43).

The School Intervention Implementation Study

The School Intervention Implementation Study (SIIS) was an empirical study of what happens when programs developed under carefully controlled conditions are placed into the schools under naturalistic conditions, which means they typically have fewer resources than they did when they were being developed and closely studied. Surveys were sent to the approximately 550 operating school districts in New Jersey, which has a variety of district organizational arrangements and styles that cover the range of what can be found nationally (Elias, Gager, & Hancock, 1993). The overall response rate was 65 percent, highly satisfactory for a study of this kind and scope.

Although the SIIS survey revealed many programs in operation across New Jersey, there was little consistency in their implementation. The vast majority of districts were doing "something" related to the prevention of substance abuse and the promotion of social competence. However, what was taking place was not systematic. In spite of mandates and encouragement for programming from kindergarten to twelfth grade, only 10 percent of the districts had a program running throughout the elementary years, 6 percent had a program throughout middle school, and 12 percent throughout high school. One-third

of the districts had at least four grade levels that received no prevention programming. Children receive little continuity in prevention programming within or across communities, and there appears to be an inexplicable neglect of programs for children classified as needing special education services. Further, the programs that were used were not necessarily those supported by a track record of empirical evidence of effectiveness or even a documented history of effective use and positive impact in other, similar districts. One surprise: Even in districts where well-supported programs were implemented under favorable conditions, instances of implementation success were matched by instances of failure. Finally, even the most promising programs showed an uneven record of being adopted (Gager & Elias, 1997).

Goleman (1998) found similar trends in many workplaces. In his study of hotels, police departments, manufacturing plants, teaching hospitals, and other work settings, programs to strengthen employees' social and emotional well-being were often successful in one setting but not in another. Best practices for implementing programs often were not recognized or followed. Therefore, understanding implementation of innovations and ways to bring best practices into common practice is becoming central to a prevention/promotion perspective.

Even those who have created successful demonstration models of school reform and community development, such as Sizer (Coalition of Essential Schools); Slavin (Success for All); Pinnell (Reading Recovery); Levin (Accelerated Schools Project); Dryfoos (Full Service Schools); Comer (School Development Program); Wandersman, Chavis, and Florin (Block Booster and Center for Substance Abuse Prevention Coalition-Building Programs); and Wolff (Community Partners), have found their work spread only to a limited number of settings. They have not solved the problem of how to bring their work to the public more broadly. Similar stories have been told by those working in mental health (Schorr, 1988).

From a community psychology perspective, then, one good way to implement and disseminate prevention/promotion activities is to focus on working with existing settings to help them become more innovative. When this happens, settings become dedicated to the continuous improvement of their own impact on their own members. That leads to adopting innovative practices in ways that are effective in that setting. This is especially true with the KISS settings you learned about in Chapter 9. Creating such organizational cultures, particularly in the schools, is among the most powerful ways to build and maintain competence in children and adolescents and serve the goal of prevention (Elias & Clabby, 1992).

WHY ARE PREVENTION/PROMOTION INNOVATIONS NOT WIDELY ADOPTED?

In *The Path of Most Resistance: Reflections on Lessons Learned from New Futures*, staff of the Annie E. Casey Foundation (1995) described the failure of the New Futures program, which cost in excess of $100 million over five years, to help

10 mid-sized cities develop and implement plans to prevent problem behaviors in at-risk youth. The cities receiving the grant awards ensured that their plans reflected the best-known work in the literature to date. All plans received extensive review and comment. The level of funding was far more than typically is available for implementing prevention/promotion initiatives. Here is an excerpt from their report:

> At the heart of New Futures was the belief that at-risk youth are beset by multiple challenges and served ineffectively by multiple systems of service delivery. Real changes in aggregate youth outcomes would require fundamental and deep changes in existing institutions and systems. Such an approach would not only serve vulnerable children and families more effectively, but it was also the only way to proceed, given the scarce public resources available for significant additions to existing youth-serving systems.
>
> By challenging communities to design comprehensive systems reforms rather than to add programs, New Futures had embarked on the path of most resistance. . . . Vested interests in current practice, fiscal constraints, and political risks created a constant force capable of minimizing system change. Some parts of the reform agenda threatened the stability of the current system, and others seemed to discount the importance of the good aspects of the system that already existed. . . . True integration at the service-delivery level, we learned, requires unprecedented commitments by school boards, child welfare agencies, and other youth-serving institutions to subordinate their traditional authority over critical functions—including budgeting, staffing, and resource allocation—in favor of collective decision making. (Annie E. Casey Foundation, 1995, pp. 1–2)

What lessons must we learn from this? What accounts for what happened? Is there any hope in continuing such efforts? Perhaps you arrived at these thoughts: Money alone will not bring about effective competence promotion and problem prevention efforts, and incorporating best practices into one's plans does not ensure success. Yet despite the failure of New Futures, many other, often smaller and less-well-funded, prevention efforts succeed.

The CASEL, SIIS, and Goleman (1998) studies cited earlier indicate inconsistencies in the content, structure, and effectiveness of prevention/promotion programs. Why? One reason is context, the ecological characteristics of each setting. The qualities of settings that we described in Chapter 5, the nature of a community in Chapter 6, the dimensions of diversity in Chapter 7, and other factors yet to be understood greatly influence the nature and impact of prevention/promotion initiatives.

Let's think of settings in terms of Kelly's (1970) ecological concepts (recall these from Chapter 5). Every setting has a unique set of interdependent relationships among its members. In one workplace, for instance, the supervisors may be more approachable and informal with employees, which may generate employee participation in a workplace exercise program or group meetings designed to foster teamwork. In a different setting, the same programs may fall flat because relationships between supervisors and line staff are more formal and distant.

TABLE 11.2   Seven Characteristics of Prevention/Promotion Innovations in Host Settings

Operator dependent

Context dependent

Fragile, difficult to specify

Core versus adaptive components

Organizationally unbounded

Challenging

Longitudinal

Further, tangible and intangible resources cycle through every setting. A high school may have an English teacher whose interpersonal skills and trustworthiness lead many students to seek her advice. She may be the ideal choice for leading a suicide or drug abuse prevention program, whereas in another setting it may be the soccer coach or even someone from outside the school. These persons will put their stamp on the program, making it different from a program elsewhere that looks the same on paper. Other resources include money, level of support from parents or administrators, and even whether the room where the program occurs is appropriate.

Prevention/promotion innovations inevitably are influenced by the ways in which individuals naturally adapt to their settings. The culture and customs of an urban school mainly attended by students of Caribbean ancestry, for instance, will differ from those in a European-American suburb. The interpersonal skills needed for adaptation will also be different, and any prevention/promotion innovation must recognize and address these circumstances.

Finally, Kelly's (1970) principle of succession means that a setting has a history, representing both continuity and change over time. An effective prevention/promotion innovation must address that history, respecting the culture of the setting while offering new directions for its development. Taken as a whole, Kelly's concepts suggest many issues for prevention/promotion practitioners to consider when transferring an effective, innovative program to a new setting.

Seven Characteristics of Prevention/Promotion Innovations in Host Settings

Table 11.2 lists seven characteristics of prevention/promotion program innovations that affect ecological relationships in a host setting. These characteristics can be obstacles to dissemination or transfer of an effective program from one setting to another. When planners of an innovation address these issues, their efforts are much more likely to be effective.

Operator Dependent   Rossi (1978) coined this term to refer to the fact that innovation and social change rely on human beings as the means of change. Clinical trials of a new medication use the same substance, in standardized dosage and

treatment procedure, in every setting tested. The nature of a prevention/promotion program, in contrast, depends on the persons involved in it. For instance, consider a school curriculum intended to lessen student drug use. Teacher/staff attitudes and commitment to the program, and their enthusiasm or lack of it, play an important role. Student peer leaders or outside speakers may enhance the program impact, depending on how they are selected, trained, and used. Program leaders may use curriculum activities carefully, or they may devise their own approach. Support from administration and from parents is also crucial for success. Similar factors affect how corporate or community programs are conducted.

In any psychologically relevant prevention/promotion initiative, the decisions made by program staff and participants are perhaps the single greatest influence on its impact. Those decisions are strongly affected by the relationship between the developer of an innovation and the staff who will implement it (Stolz, 1984).

One aspect of operator dependence is that to be taken seriously, an innovation must mesh with the developmental stage and self-conceptions of the staff who implement it. Skilled staff members in any setting take pride in their craft and view their work with a sense of ownership. To gain their approval, an innovation must fit their values and identity: for instance, a police officer's sense of what police work involves. At the same time, an innovation must also offer something new that increases the staff's effectiveness as they define it. Staff members of different ages, ranks in the organization, or levels of seniority may support or resist an innovation, depending on how they understand their work and roles.

Context Dependent   Staff members or operators are not the only humans involved in a prevention/promotion innovation. The participants or recipients of the initiative also influence its impact, as does the social ecology of the setting. In the example of a school-based drug use prevention program mentioned earlier, student culture and expectations affect the classroom climate and may even undermine any impact of the program. For instance, research indicates that such a program is more likely to be effective with younger adolescents, before drug experimentation or mistrust of adults becomes more common (Linney, 1990). Thus, developmental stage and self-conception are as important for program participants as for program operators.

Each school, workplace, or community has a mix of ages, genders, races and ethnicities, income levels, and other forms of diversity and personal identity that an innovation must address. These factors affect the social norms of the setting and the skills and resources of its members, and therefore the goals of a prevention/promotion innovation. Furthermore, an innovation may draw a different response in a setting with a strong sense of community among its members compared to one without it.

Finally, the program circuits of the setting (Barker, 1968; recall this from Chapter 5) constrain any prevention/promotion innovation. Middle and high schools restrict most activities to strictly timed periods, for instance. Neighborhood programs must provide child care and other practical support to meet the needs of their participants.

Fragile, Difficult to Specify   As with any means of teaching or social influence, the key elements of a prevention/promotion program may be difficult to specify (Tornatzky & Fleischer, 1986). At first, it is easy to assume that the new curriculum in a school-based initiative or the new policy in a corporation or community is the critical element. But a moment's reflection undoes that assumption: psychological innovations are operator dependent, not standardized. Yet what aspect of that operator dependence is the key? Is it participant expectations, staff skill or commitment, extent of staff training or supervision, how much time or money is committed by the organization to the program, whether the top leadership makes clear its support, or other factors? Is a committed, energetic staff the key, regardless of what curriculum they use? Is it the use of small-group exercises and discussion rather than lecture? In one setting one of these factors may be the key, whereas another variable is crucial elsewhere. There are often multiple keys to success. This uncertainty makes the program fragile in the sense that it will assume different forms in different settings, with different effects. It may never be implemented the same way across settings.

In a sense, transferring an effective innovation to a new host setting is impossible (London & MacDuffie, 1985). Operators in the new setting inevitably will make changes in the program to fit their needs, values, and local culture. Indeed, some of these changes are necessary to respect the history and culture of that setting. In the long run, this can be a strength, because a setting committed to innovation can develop prevention/promotion initiatives that fit its context. However, an innovation that is difficult to specify may leave its operators unsure of their roles and responsibilities at first. That uncertainty may be welcomed by bold personalities and by those who are confident of support from their superiors; it may be resisted by others who prefer more structure or who feel unsupported.

Core versus Adaptive Components   Despite the challenges we have just mentioned, developers of prevention/promotion innovations need to specify the key components of their programs, especially when they transfer their initiatives to new host settings. Two types of components have been identified. Core components are crucial to the identity and effectiveness of the program and need to be transferred with fidelity and care. Adaptive components may be altered to fit the social ecology or practical constraints of the new host setting (Price & Lorion, 1989).

For one school-based innovation, the core aspect may the written curriculum and skills to be taught. For another, its characteristic method of small-group exercises and discussion is the key; its written curriculum can be adapted to the host setting context. For some innovations, building social support among program participants is the core feature regardless of how that is done. For other innovations, particularly educational ones, learning skills is the core feature, whereas methods of promoting that learning may be adapted to the setting.

Developers and advocates need to pay considerable attention to how core features are being used by the operators in a new host setting. They also need to help those operators develop their own ways of implementing the adaptive features, to fit the circumstances of the setting. Of course, the more difficult it is to specify the core components (see the preceding section), the more difficult this task becomes.

Organizationally Unbounded For many prevention/promotion initiatives, effectiveness means changes in many areas of the host setting or organization (Tornatzky & Fleischer, 1986). Prevention/promotion programs are not isolated; they are connected to many persons and setting activities. (Recall Kelly's principle of interdependence.) For instance, Comer's (1988) approach to improving school climate involves strengthening relationships among teachers, all other staff, students, and parents. Comer (1992) noted that in a middle school using this approach, a new student, whose foot was stepped on by another student, immediately squared off to fight, a behavior expected in his former school. "Hey, man, we don't do that here," he was told by several other students, who succeeded in defusing the tension. That is an organizationally unbounded innovation. It began with strengthening adult–adult and adult–student relationships yet spread to student–student relationships. Those outcomes may be affected as much by a custodian, secretary, or parent volunteer as by teachers or administrators. They may include changes in behavior out of class, not just in it.

An effective, organizationally unbounded innovation is a fine thing to have, but it is difficult to introduce. To members of the host setting, it may seem to lack focus or to require abrupt changes from everyone all at once. Those who believe that a problem is limited to one area of the organization will resist involvement. For instance, a school may implement a number of innovations to prevent violence in school. Those who believe that violence prevention is solely a disciplinary matter will resist changes in curriculum to teach students skills in conflict resolution or training of student peer mediators for informal resolution of conflicts. They may say things like, "That's the vice-principal's job, not mine," or, "Dealing with misbehavior is an adult's job."

Challenging Any innovation is a challenge to a setting. By its nature, it suggests that change is needed. At the same time, that challenge may be understood by staff or program participants as an opportunity for growth or as an answer to a problem. These perceptions may depend on whether the organization is responding to a crisis and whether the innovation is believed to require change that is difficult or feasible, abrupt or gradual. Even the language that innovators use may contribute to those perceptions.

If you have studied developmental psychology, you have no doubt encountered Piaget's distinction between assimilation and accommodation (Flavell, 1963, p. 47). Like individuals in Piaget's theory, organizations also tend to assimilate their experiences to fit their existing ways of thinking if possible. Only if necessary do they accommodate those ways of thinking to incorporate new ideas or practices. Interventions that fail to respect and use the existing culture of a setting—its history, rituals, symbols, and practices—will be rejected or assimilated only partially or in distorted form. A program that is adopted because of pressure from above or outside an organization also is likely to be abandoned as soon as that pressure abates. Innovations that respect organizational culture and that are based on collaboration with stakeholders can lead to accommodation in organizational thinking and practices, and thus to lasting changes.

Weick (1984) mustered evidence from social and cognitive psychology for the conclusion that when extensive changes are required of humans in organizations, their sense of being threatened rises, as does their resistance to change. When the proposed change seems smaller, the perceived threat is smaller, risks seem tolerable, allies are easier to attract, and opponents are less mobilized. **Small wins** is Weick's term for limited yet tangible innovations or changes that can establish a record of success and sense of momentum. In such a context, advocates of prevention/promotion must consider their language. If they portray their innovation as a logical outgrowth of the setting's history to date and as a sensible response to current challenges, resistance is lessened.

When an organization or community believes itself to be in crisis or facing problems that require sweeping change, more challenging innovations may be accepted. Indeed, under those conditions, small wins may be seen as inadequate. However, most innovations take place in a climate less charged by a sense of crisis.

Longitudinal   This idea is similar to Kelly's principle of succession. An innovation takes place in a setting with a history and culture. To be effective, it must change that setting in some way (Tornatzky & Fleischer, 1986). To be lasting, it must become part of that history and culture, not dependent on an influential leader or a few staff members, all of whom will eventually leave the setting. It must be **institutionalized**, made a part of the setting's routine functioning. Consider a youth group, a support group for senior citizens, or an organization at your college or university. How would it be different if a new, untrained leader runs it every year versus having a longer-term leader who, when she does leave, trains her successor well?

Moreover, any effective prevention/promotion innovation must be repeated or elaborated periodically for effect. One-shot presentations or activities seldom have lasting impact. Teaching a child to read is a multiyear effort, from identifying letters to reading novels (Shriver, 1992). Should it be any surprise that learning social-emotional skills or developing attitudes that limit risky behavior cannot be done quickly?

Summary   Prevention/promotion innovations, by their nature, face obstacles to being adopted within organizations and communities. They are dependent on operators, usually staff who must implement the innovation. They also are dependent on the social context and even physical environment in which the innovation takes place. Their key elements may be difficult to specify or explain and fragile or difficult to transfer to new settings. They challenge organizational thinking and tradition and may generate resistance. They must be sustained over time to be effective.

These qualities represent obstacles for prevention advocates, yet they also suggest the presence of resources. The operators and participants on whom a program is dependent represent potential resources for enriching that innovation, if they are approached as partners and their life experiences and culture respected. Resistance to a proposed change may be rooted in loyalty and commitment to the setting or community, a resource that can also be channeled beneficially.

Advocates of prevention/promotion need to understand these challenges, respect their sources, and work with members of a setting or community to overcome them.

IMPLEMENTING PREVENTION/PROMOTION INITIATIVES WIDELY AND EFFECTIVELY

For an article discussing the challenges of doing effective preventive work in community settings, Kelly (1979b) took his title from a hit song of the 1940s, "Tain't what you do, it's the way you do it." In working to improve community life, means, or how we do things, matter as much as ends, or goals. How implementers of a prevention/promotion effort form relationships with collaborators and citizens is critical to ultimate success and integrity. Our preceding discussion of prevention/promotion as complex, operator-dependent initiatives suggests some reasons why this is so. Human beings (teachers, nurses, parents, program staff) implement programs. The work of community psychologists and others who want to initiate prevention efforts involves forming relationships with these persons. Implementers must communicate clearly the core program elements that must be faithfully replicated while also collaborating with those in the host setting to modify adaptive features so that they will "fit" the local and particular qualities of that setting. Moreover, both the intended and unintended effects of the program must be studied because these are not necessarily going to conform to patterns shown in the original setting in which the program was developed. To paraphrase Kelly (1979b), it's both "what you do" and "the way you do it" that matter.

Ten Considerations for Praxis and Implementation

Prospective implementers of a prevention/promotion initiative must consider many factors. These are summarized in Table 11.3 and are drawn from a number of reviews of community psychology practices (e.g., Chavis, 1993; Elias, 1994; Price, Cowen, Lorion, & Ramos-McKay, 1988; Vincent & Trickett, 1983; Wolff, 1987, 1994).

There is no precise way to express the relationship among the considerations in Table 11.3. Each might be considered a necessary but not sufficient condition for what we describe as **praxis**: program implementation that integrates action, research, and reflection while developing the program and sustaining it over time, and while taking into account the program objectives and the actual ongoing outcomes of the program. Thus praxis refers to implementation that is at least somewhat different in every setting, taking into account the considerations in Table 11.3 and linked with community psychology's commitment to participant conceptualization.

Among the considerations in Table 11.3, **context** refers to the developmental levels and concerns of program staff (e.g., both their age-related concerns and

TABLE 11.3   Considerations in the Praxis of Prevention/Promotion Innovations

Praxis:
  Implementation of program, with integration of action, research, and reflection on program objectives and actual ongoing program outcomes.

Considerations:
  Context: Developmental, historical, and situational context of the program

  Grounding: Understanding of the problem and the literature

  Theory: Clarity about theoretical perspectives

  Learning: Principles for creating effective, supportive learning environments

  Instructional Strategies: Appropriate strategies, tailored to particular groups of learners

  Formats: Appealing, engaging delivery systems and formats

  Materials: Evidence-based, user-friendly materials

  Hospitable Organizational Context: Readiness for the program

  Resources: Available, accessible resources to support program implementation

  Constraints: Constraints, limitations, and obstacles to program implementation

their seniority in the setting), historical issues in that setting (e.g., prior experiences with similar innovations), and situational factors salient there. Cultural traditions and norms may influence historical or situational forces. **Grounding** in the problem and literature and clarity about **theory** both reflect the need for implementers to understand not only the problem and research literature, but also the conceptual underpinnings of the program. Whose previous work is a useful guide? What theories or concepts are being drawn upon? What are the implicit values? How closely do these match those of the prospective or current host setting? How similar are previous implementation contexts to the one being considered now?

Have you ever attended a class or workshop on an interesting, timely topic, yet found that it was primarily a lecture, with unclear objectives, poor handouts, delivered without evident caring, and with inadequate time for questions? That experience illustrates the importance of the next four considerations: using principles for creating effective, supportive **learning environments**; appropriate **instructional strategies**; appealing and engaging **delivery formats**; and evidence-based, user-friendly **materials**. These terms relate specifically to the mechanics of creating change.

Change often involves some kind of education or reeducation. Much has been learned about techniques for accomplishing this kind of education, although remarkably little of it finds its way into the psychological intervention literature, in part because of traditional research design and publication-related constraints. For a prevention/promotion intervention to be effective, it must use effective learning principles. These include attending to the amount of information presented and the pace of presentation; strategies that are geared to the audiences, whether adults or children, professionals or novices, or members of particular cultural groups; consonant behavioral tactics, which typically involve active learning

and examples and a style that communicates caring; and supportive materials that enhance the learning and give people something to take home with them.

Hospitable organizational context refers to the readiness of the host setting for the program. Price and Lorion (1989) and Van de Ven (1986) emphasized that members of an organization must be ready to accept an innovation, preventive or otherwise. There must be a perception that there is environmental pressure, or at least support, for the innovation along with an awareness and acceptance of a problem by the host organization and a set of attitudes, beliefs, and practices held by staff that is compatible with the prevention/promotion effort being proposed. The innovation must be able to find a place within the structures and services already in the host organization, and the staff must be able to imagine how they can relate to it.

In any action-research situation, one must consider the balance of **resources** and **constraints**. Certain types of resources—funds, facilities, and expertise— must be accessible, and potential implementers will require reassurance that all these supports are in place. Constraints—which include shortages of resources but also such factors as a negative history with prior innovations, poor morale, distrust among different levels within the host setting, unstable hiring or retention practices, and other types of organizational instability—all work against effective implementation. If resources are not in place and/or constraints are considerable, more groundwork needs to be laid before the innovation is introduced, a process Sarason (1982) has aptly termed what happens "before the beginning." Even a cursory look at Table 11.3 makes clear the challenge of innovations occurring in contexts of poverty, violence, distrust, and apathy and the need for much groundwork to be laid before embarking upon them with a hope of lasting success.

In summary, change agents interested in prevention must be prepared to immerse themselves into local settings and contexts; to be patient; and to build and extend their ranks through participation, collaboration, and explication (O'Donnell, Tharp, & Wilson, 1993). It is a tenet of the field that the energy and direction for solutions for social problems come from the local level (Cowen, 1977; Price & Cherniss, 1977). As we learned earlier, another tenet is that small wins are powerful and can build momentum for sustained change (Weick, 1984). There is much that can be accomplished in the area of prevention and promotion if innovators are prepared to implement efforts with creativity, tenacity, and integrity.

Applying the Ten Considerations: An Exercise

Imagine that you are in charge of adapting a prevention/promotion program for a middle school to reduce the risk of violence among students in school. Use the implementation considerations in Table 11.3 as a guide to planning your approach.

First, you will gather information about the developmental, historical, and situational **Context** of the school and community. What violent acts are of concern here? What sorts of violence or related problems occur regularly, such as fights, bullying, hazing, or sexual harassment? Are these linked to factors such as cliques among students, gang activity, or drug use? Do adults in the school

condone violence as a means of resolving conflicts? What are community attitudes about violence? Who else in the community is conducting similar efforts? What have they learned, and how might they be resources? How has the school addressed this issue before, and what were the results?

Second, you look closely at the research and practice literature about the problem and how it has been addressed (**Grounding**). You identify a program that has been shown to be effective in a demonstration project at a school located near the university where this program was developed. However, the school is different from yours in many ways, including the socioeconomic and racial profile of students, the makeup of the teaching staff, and the extent of monitoring of program implementation by the developers of the innovation. You then look at the way in which the program is structured. You note positively the presence of a skills–oriented approach with many interactive exercises, multimedia, and modules to address different cultural subgroups (**Theory, Learning Environment, Instructional Strategies, Delivery Formats, Materials**). A trip to an educational materials library shows you that the materials are moderately user friendly. As you turn your attention to the middle school in which you will work, you note there is a new principal but an experienced staff and an involved, supportive parents' group. Both teachers and parents believe that something should be done to address the issue of violence, although they have a diversity of ideas about how to do that. Overall, **Resources** appear to outweigh **Constraints**, as long as the experienced staff members support an innovation (**Hospitable Organizational Context**). Your question now is: How can I bring the core elements of the program into my school, retaining its effectiveness while adapting it to the local and particular qualities of my setting?

Box 11.1 illustrates how some of these issues, especially the importance of assembling and organizing resources and paying attention to context, apply when a prevention/promotion is being implemented in multiple countries.

Historical Stages in the Process of Adapting Innovations to Settings

Historically, concepts of how best to transfer effective educational programs and adapt them to new host settings have evolved through four stages (RMC Research Corporation, 1995), which we summarize below.

- **Cookbook:** In the 1970s it was believed that programs had to be thoroughly documented, ideally in "kits" that could be followed precisely, step by step.

- **Replication:** Later, model programs were replicated by having staff trained in the methods used by program developers and then bringing these methods back to their own settings to be carried out as similarly as possible but with some room for individual adaptation.

- **Adaptation:** By the late 1980s, models were understood to require adaptation to the unique context of the host site, ideally by having the developer serve as a consultant in making the necessary changes.

BOX 11.1 Bringing JOBS to Multiple Countries and Contexts

The JOBS program (described in Chapter 10) has been implemented across different cultures. Its chief developer, Richard Price (2002), identified many potential cultural misunderstandings during the collaborative process. Dimensions along which misunderstandings can occur include time orientation, orientation to authority, negotiation style, gender roles, assumptions about the nature of people, sense of the self, task orientation, and communication style. (Recall that we discussed some of these in Chapter 7 in our section on individualism-collectivism.) Price suggests that successful collaborations in multiple countries or localities require "local cultural partners" who serve as guides to the local context. The collaboration thus consists of technical expertise on the part of program developers and consultants and context expertise on the part of local experts. Here is how he describes the work in Finland, China, and California (pp. 3-4):

> Let us first consider Finland. With the breakup of the Soviet Union Finland lost its principal trading partner and unemployment skyrocketed to nearly 20%. Finland still has a strong tradition as a welfare state political economy. Government officials believe that it is important to strengthen the safety net of government services to cushion the blows of unemployment. Furthermore in Finland where the state assumes considerable responsibility for the welfare of its citizens, the government infrastructure already exists for   .
> disseminating social services and practices.
>
> A very different picture emerges in the People's Republic of China as the context for implementation of the JOBS program. China is engaged in economic reform and a dramatic shift from socialism to a market economy. The "Iron Rice Bowl" of benefits and services associated with one's job is being broken in favor of market capitalism. This means the security of jobs in state owned enterprises is disappearing and workers "leap into the sea" of an uncertain employment and economic future. At the same time government officials in China are very concerned about social unrest associated with large-scale unemployment and are therefore positively disposed to implement programs to help workers make the transition to a new job when they are laid off from their jobs in state owned enterprises.
>
> In California the picture is different in still other ways. California is subject to a "boom and bust" economy. Like much of the rest of the United States, the social service system in

California is in a period of devolution. There is a strong move to get rid of state services and public services are being dismantled in health, labor, education and other arenas. What social services exist in California do so because private nonprofit and for-profit organizations contract with the state to deliver the services, and each agency operates in a competitive entrepreneurial environment. In addition, private foundations attempt to mend some holes in the safety net with private philanthropy in support of service programs for vulnerable populations.

Price also emphasized the importance of local "implementation champions" who served as essential guides for program success (p. 4):

> Each champion did so by understanding the particular problem- framing needed to make an argument that the JOBS program would be crucial to implement in their own particular cultural and political setting. The champion also recognized key challenges or dilemmas to be solved before the JOBS program could be accepted and implemented. To respond to the challenge or dilemma, they had to create an organizational arrangement that worked in their own political and cultural context responding to the challenge. Finally, in making the deal they used their own cultural map in a distinctive way that took advantage of the leverage available in their own cultural and political settings.

The JOBS program champion in Finland, a scientist in the Finnish Institute of Occupational Health, recognized that implementation would not take place until a pilot program demonstrated that JOBS was consistent with Finnish culture and arranged for a study to take place. In China, the champion was a psychologist at the National Academy of Sciences and an influential actor in the People's Consultative Party in China. She recognized that a top-down model was essential and so she used her social network and personal political capital to obtain a "red letter" that directed local agencies in seven cities to cooperate in the JOBS project. California's champion was a social entrepreneur who served as a consultant to a California foundation. He capitalized on the convergence of the JOBS approach and local concerns about the risks of long-term unemployment, which was also part of the mission of the foundation.

B O X 11.1 (Continued)

Summarizing the case studies of implementation, Price (p. 5) identified three key elements that distinguish the work of cross-cultural and cross-context innovation champions:

- **Social capital and network access.** "In the case of China it was connections to the right official, in Finland it was connections to the right government agencies and in California it was connections to the right network of agencies and philanthropic foundations."
- **Knowledge about problem framing.** "They know that the crisis in China's unemployment problem is a source of social unrest, that in Finland unemployment is a government responsibility and requires government action; and that in California

unemployment is seen not by the government but by a philanthropic foundation as relevant to the health problems of Californians."

- **Procedural knowledge.** "Procedural knowledge is deeply political and culturally specific in nature. Procedural knowledge tells culturally situated innovation champions how to get things done in unique cultural and political settings. In China a red letter opens doors and commands resources. In Finland intergovernmental agreements and empirical evidence unlock resources. In California building a coalition of agencies and foundations serves multiple interests and makes coalitions possible."

SOURCE: Price (2002).

- **Invention/Innovation:** Recently, models have been seen as sources of ideas and inspiration rather than procedures to replicate or adapt. There is emphasis on creating one's own program, tailored to the unique circumstances at a given time, yet using ideas gleaned from best practices literature. The exercise just presented embodies an invention/innovation approach.

Interestingly, these stages parallel some aspects of individual development illuminated by Jean Piaget and Erik Erikson. Like Piaget's stages of cognitive development (sensorimotor, preoperational, concrete, and formal operations), they progress from concrete experience and thinking to use of abstract principles applied to specific problems (e.g., invention/innovation).

In addition, many adult learners who play major roles in implementing prevention/promotion programs (e.g., teachers, parents, health professionals, community leaders) will be in Erikson's stage of *generativity* in middle adulthood (Erikson, 1950, 1982). At this stage, people have accumulated a certain amount of wisdom. They have "been there, done that." Yet they are open to change if it promises to lead to some positive impact on the next generation, especially something that transcends themselves (Sarason, 1993). They often will value creating more than following. Thus, development and ownership of an innovation are key elements. There is a special sense of fulfillment in being generative as opposed to replicating precisely that which others generated. This directly supports RMC's findings, as well as those of the CASEL Mode Site Study and SIIS discussed earlier, and helps explain why so many schools create their own programs out of existing ones rather than adopting programs developed by others. SIIS and other data indicate that the tendency to invent is greater than the tendency to adapt or adopt.

Thus, successfully disseminating a model program involves implementing and institutionalizing it in a new site while capturing the excellence of practice by linking practice to theory. As noted in the CASEL Model Site Sustainability

Study, what is transferred to others includes not only procedures but also an understanding of the principles that undergird a specific program or practice. From this perspective, it is not only necessary to "talk the talk and walk the walk;" it is necessary to "talk the walk," to explicate practice activities in an articulate and heuristic, generative, instructive, and inspiring manner (Elias, 1994; Fullan, 1994). The ten considerations in Table 11.3 provide guidance for a journey of development for prevention/promotion innovation in a new host setting. The destination and general route are indicated, but specific pathways, timing, . obstacles and detours, and resting points are to be chosen by members of the setting. Community psychology, with its rich use of ecological and historical concepts, has much to offer to the study and practice of improving the way in which preventive and health-promoting innovations are organized to influence local settings and beyond.

To return to our example of implementing a program to prevent school violence, you might decide to study the context of the school deeply and to gather the ideas, support, and willing involvement of teachers, administrators and school board, parents, and students before implementing a program. You also might want to allow staff and others involved to exercise creative judgment and control over adaptive features of the program rather than expecting them to implement someone else's program in a concrete way. Yet you would also want to identify the core principles of that program, implementing them in ways faithful to its basic premises that are necessary for it to be effective. How can you balance these expectations? A musical analogy may help.

A CONDUCTOR'S GUIDE TO ENDURING
IMPLEMENTATION

Our favorite analogy for implementing prevention/promotion innovations is that of a musical conductor, especially one who also arranges the orchestration of the music. As a conductor begins to practice the piece with a given orchestra's musicians in a given concert hall, the phrasing, tempo, and dynamics of sound may require adaptation from the music as written. In addition, there are times when the music itself has a few gaps in detail. Moreover, performing a piece is more than reading and literally reproducing the written score; performers and conductors must find ways to express the spirit of a composition. Conductors have certain principles that they follow to provide some guidance even as they must make unique and creative decisions. Similarly, there are principles that can guide those who embark on the complex, operator-dependent task of implementing a prevention/promotion initiative (Elias, Zins et al., 1997; Kelly et al., 1988; see Table 11.4).

1. **Carry out environmental reconnaissance** (Trickett, 1984). Do not promise or deliver a totally finished product. Instead, build the basis for action research by discussing the need for modifying any program adapted from elsewhere through careful study of its effects in this setting. The guiding

TABLE 11.4 Conductor's Guide to Orchestrating Prevention/Promotion Innovations

1. Carry out environmental reconnaissance.
2. Ensure strong agreement on program goals among all stakeholders.
3. Ensure connection of program goals to the core mission of the host setting.
4. Consider a coalition with related local settings.
5. Develop strong, clear leadership.
6. Describe the innovation in simple terms, especially in the beginning.
7. When the program begins, ensure implementation of its core principles and elements.
8. Measure program implementation and attainment of program objectives throughout the operation of the program.
9. Search for unintended effects of the program.
10. Plan for institutionalization of the program in the host setting.
11. Establish external linkages with similar programs in other settings.

principle is to start a pilot project using the most basic model that has been used in a similar setting and subsequently modify it. This can be done through the process of monitoring program implementation procedures, evaluating outcomes, providing feedback to the setting, and making appropriate modifications in the program (a process we discuss further in Chapter 14; see also Elias & Clabby, 1992).

2. **Ensure strong agreement on program goals among all stakeholders.** Teachers, administrators, parents, students, and other important groups are stakeholders in a school setting. In a locality, stakeholders include elected or other government officials, representatives of community and private organizations, and interested citizens. Stakeholders need to be included in wide-ranging discussion of the problem to be addressed by a prevention/promotion initiative. For instance, they need to discuss the nature of violence in your school district and community. They also need to set the goals of an intervention or program. Once goals are agreed upon, participants will have a guide for decisions about choice of model programs, implementation details, measuring program effects, and responding to critics.

3. **Ensure connection of program goals to the core mission of the host setting.** A host setting (e.g., school, worksite) is unlikely to adopt a prevention/promotion initiative unless its members can grasp a clear relationship between its purpose and the mission of their setting. For instance, in a school, prevention/promotion relates to students' needs in the areas of behavior and health, but it also relates to their academic education. A prevention/promotion program such as Interpersonal Cognitive Problem Solving (Shure, 1997) that teaches skills for everyday decision making and problem solving also should have implications for reasoning skills needed in academic subject areas (Elias, Zins et al., 1997).

4. **Consider a coalition with related local settings**. Many prevention/ promotion initiatives concern a community problem not limited to a single school or setting. If your aims relate to a community-level problem, involve related community settings in the process of goal formation and program development. For a school-based violence prevention program, this might include police, domestic violence agencies, mental health or family guidance agencies, substance abuse treatment facilities, youth centers or recreation programs, local businesses, and religious congregations. Sometimes the stakeholders are more numerous than first appears obvious.

5. **Develop strong, clear leadership.** Hard choices will have to be made and mid-course corrections will be frequent. The effectiveness of a prevention/ promotion initiative may require sharing of resources among multiple, often competing groups. Strong leadership helps to build collaboration, especially by listening carefully, working slowly for small wins, and keeping participants focused on shared goals.

6. **Describe the innovation in simple terms, especially in the beginning**. Price and Lorion (1989) emphasized the value of focusing on a few simple objectives and characteristics of the innovative program, even if its implementation ultimately will be more complex and have many components. Articulate to others, "We are here to . . ." and "The way we do this is through 1 . . , 2 . . . , 3. . . ." This allows for mobilization of internal resources and easier project management. Though the reality is more complex, focusing allows communication and key elements to be prioritized planfully (Van de Ven, 1986).

7. **When the program begins, ensure implementation of its core principles and elements.** Identify the core elements of the program innovation and replicate these as faithfully as possible in your setting. This typically requires intensive staff training and ongoing coaching and supervision. Also valuable is consultation by the original program developers or others who have implemented the program in settings similar to yours.

8. **Measure program implementation and attainment of program objectives throughout the operation of the program.** This measurement may range from practical to scientifically precise (see Chapter 14). However, some form of assessment is essential. Foremost, it is a statement of values, of ongoing commitment to goal achievement and accountability to those who are carrying out and receiving the initiative. Secondarily, continuous assessment of process and outcome allows adaptations of a program to be made as its context changes. Finally, measurement provides evidence of program performance that funders and stakeholders require. Many settings find it valuable to use the Levels of Use assessment (see Box 11.2). This involves determining the degree to which a program is being implemented in a knowledgeable and appropriately flexible way by staff. It also requires that those developing and implementing innovations be very clear about the learning curve of its human operators as well as how innovations should be carried out under a range of circumstances.

B O X 11.2   Levels of Use of an Innovation

Level of Use	Qualities of Implementers at This Level
Nonuse	Have little or no knowledge, no involvement and no actions to help them become involved.
Orientation	Are acquiring information about the innovation and its value orientation and what it will require to carry it out.
Preparation	Are preparing to use a new idea or process.
Mechanical	Focus on short-term, day-to-day use, mastering the specific tasks and techniques they must carry out.
Routine	Have established use of the innovation. Regular patterns of implementation predominate and few changes are made in ongoing use.
Refinement	Fine-tune efforts based on feedback from consumers/clients and from their own experience.
Integration	Begin to step back and look at the big picture of the paradigm of the innovation they are doing. They focus on how to combine their own efforts with those of colleagues.
Renewal	Reevaluate practice in light of factors such as changes in population, student needs, staffing patterns, freshness/relevance of materials.

SOURCE: Based on Hord, Rutherford, Huling-Austin, & Hall (1987).

9. **Search for unintended effects of the program.** Any innovation in a host setting will have unintended effects, both positive and negative. Being alert to these possibilities during the assessment process can lead to revision or refinement of the program. In early prevention programs, for example, outside experts would come in and carry out interventions in schools. Teachers were thrilled; they would leave the class and use the time for extra preparation or grading papers. However, when the experts left, there was little of the program left behind and little chance for teachers to reinforce the principles of the program throughout the rest of the school day. Documentation of such unintended effects has led to rethinking about the role of setting members in the implementation of prevention/promotion innovations toward the necessity of their having direct and ongoing involvement.

10. **Plan for institutionalization of the program in the host setting.** Assume that the program will need to outlast the staff members who initiate it. Plan for how to institutionalize it, incorporating it into the host setting's routine functioning so that it survives after its founders have moved on. In addition, develop a process of program renewal so that it can be adapted to changing needs and circumstances in the host setting, including turnover of personnel. Failure to consider this aspect of the implementation process is probably the main reason why good programs do not persist.

11. **Establish external linkages with similar programs in other settings.** Networking is the lifeblood of enduring innovations. Relationships with other implementers—via meetings, distance learning technology, the Internet, shared newsletters, conference calls—provide ideas and technical assistance,

opportunities to share triumphs and frustrations, and social support from individuals who are going through the same things. In addition, networking provides a base for actions on broader issues, such as advocacy or funding.

In case you are wondering if you have to do all of these things in order to be successful, the answer is a definitive "yes and no." The first time you look at a piece of music, you wonder if it can ever be mastered. With practice and attention to feedback and learning, and often through working with others, you learn to play compositions that seemed imposing at first.

Prevention/promotion work is similar. It uses a process of action research so that there is continual feedback and adjusting to the specifics of the context. This feedback often involves both qualitative and quantitative research. The accumulation of feedback through the action-research process leads to modifications that continuously strengthen both core and adaptive features of the program. Prevention/promotion work occurs in teams to an even greater extent than music. Creative leadership, flexible adaptation to context, and appreciation of the interdependencies among stakeholders and the resources each brings to the shared work all converge to create ongoing innovation and high-quality programs.

IMPLEMENTING A PREVENTION/PROMOTION
INNOVATION: A CASE EXAMPLE

In this section we describe a case example of implementing a school-based prevention/promotion program in multiple school settings. Its path of implementation took many twists and turns, influenced by action research, a commitment to continuous program improvement, and the practicalities of school and community life. Our example is the Social Decision Making and Social Problem Solving (SDM/SPS) Project (Elias, 1994; Elias & Clabby, 1992), a school-based prevention initiative.

The SDM/SPS Project has used the Conductor's Guide described earlier for over two decades. It has spread from a demonstration project in two experimental and three control classrooms to hundreds of classrooms in schools in two dozen states and several countries. The core of the project involves building the social and emotional skills of students, with a focus on self-control, group participation and social awareness and a decision making strategy to use when faced with difficult choices under stress or when planning. Its ultimate goals include promoting successful social and academic performance and preventing problem behaviors (Elias & Clabby, 1992; Elias & Tobias, 1996).

The task of orchestrating the development and spread of this innovation, with which the primary chapter author (Maurice Elias) was involved from the onset, will appear much more organized in its description than in its reality. Think of orchestrating in a context where all the players are standing on a boat in stormy seas wearing roller blades. The wind is blowing, pages of the musical score are regularly getting washed overboard, even a few members of the orchestra are

slipping into the water every now and then, and at times several people believe they are the conductors. If you read the following with this scene in mind, you will be closer to the reality than what the printed page typically allows. Keep in mind, however, that after 20 years the boat is still afloat, many more people have joined the orchestra, and we have learned a lot not only about orchestration but also about sailing in heavy seas.

We drew initial guidance from the principles in the implementation considerations presented earlier, although we were only dimly aware of all of these terms when we started. From the inception of the project, we tried to make the initial implementation conditions match those likely in the school environments where the program would eventually be implemented. Thus little of the available funding went into creating ideal training conditions, providing special resources and materials to implementing teachers, paying for any training or implementation work, having experts work directly in classrooms, or finding locations with strong receptivity to prior innovations. Instead, we sought to work in conditions as close to the real world as possible. Furthermore, we were acutely aware of developmental factors and of the need to modify what we were doing for diverse populations, particularly children with special education classifications.

Evolution of the Elementary School Level Program

The history of much of this effort, as well as the way in which planned and unplanned variations in conditions were addressed, is detailed in Elias and Clabby (1992). Key points in the voyage, however, can be described here. At the elementary school level, we created a scripted curriculum with extensive accompanying materials, all developed through nine years of continuous improvement in an action-research cycle. Other action-research cycles were created to support modifications of the approach for special education and middle and high school populations. In particular, the creation of an acronym for the eight steps of social decision making—FIG TESPN—led to dramatic improvements in delivering the program to special education students (Elias & Tobias, 1996). Another important finding was the need to integrate the learning of problem-solving skills with the application of those skills to academic and interpersonal situations as soon as possible after learning them in class.

We also discovered the value of sharing learning across implementation sites in a systematic way. The Problem Solving Connection Newsletter was created as a resource exchange network for those using social problem solving or related interventions; in the days before e-mail, it became a place to ask questions and to share innovations, to incorporate diversity and change into the implementation context. It is where such creative adaptations as the "Keep Calm Rap" were developed and redeveloped, as well as "Be Your Best," which one class began to sing to the tune of Disney's "Be Our Guest," from *Beauty and the Beast*. Most recently, branches of the project have been focusing on distance learning coalitions and Internet exchanges as vehicles for implementation sharing and support.

Adaptation to Middle School

Although there is far less uniformity among elementary schools than unsuspecting outsiders might think, there is even greater diversity among middle schools. This means that intervention technologies are not easily transferred from elementary to middle school. It also means that successful interventions in one middle school context must be transferred to others with much care. In attempting to provide follow-up for the elementary school level social decision making and problem-solving program into middle school, we found that numerous adaptations had to be made. This was discovered as an outcome of action research and by being clear about the core features and goals of the program. Even after creating successful demonstration projects, however, those involved were not filled with a sense that the work was completed. There was the matter of providing a well-annotated musical score for others to use. This gave rise to the book, *Social Decision Making and Life Skills Development* (Elias, 1993, revised and updated as Elias & Bruene, 2005b).

We were wary of providing a set "score"; therefore, we chose to provide key principles and specific examples as inspiration rather than fully scripted materials. Those who had brought social problem solving successfully into their local settings (in our orchestral analogy, local conductors, the first players of different orchestral sections, and some individual musicians) explained clearly their own use of problem-solving principles in the classroom. This helped readers imagine using program materials; though they began in ways similar to the examples provided, soon thereafter their applications were integrated with their own skills and context.

To introduce each innovation to prospective implementers, we first presented a sales pitch that made the program sound attractive and viable to those who might implement it. Then came a discussion of program materials and how they could be used. Next, we discussed evidence of its effectiveness, accompanied by listings of follow-up and support resources. Finally, we presented sample activities to allow readers to try out specific modules and get a feel not only for the particular details, but also for the flow of the activities with the individuals and groups involved (Elias & Bruene, 2005b). Some examples of modules follow.

1. A video program that shows children how to watch television and then use social decision making and problem solving to create their own programs, series, documentaries, and public service advertisements.

2. A format that allows students to create school and community service projects.

3. A procedure for creating parent newsletters and other school-home communications; the details include such things as what to tell the printer in reproducing photographs.

4. FIG TESPN, an approach to social decision making and problem solving that takes into account the special learning needs of many children. The acronym includes the following:
   Feelings are my cue to problem solve.
   I have a problem.

Goals guide my actions.
Think of many possible things to do.
Envision the outcomes of each solution.
Select your best solution, based on your goal.
Plan, practice, anticipate pitfalls, and pursue it.
Next time, what will you do the same or differently?

5. Troubleshooting sections, where the practitioners in the field talk about the tough issues and how they have dealt with them. Examples include issues of getting started, not having enough time, and working with children who seem to place a positive value on aggressive behavior.

Setting Up an Infrastructure to Support
Widespread Implementation

To support the process of widespread implementation with fidelity and effectiveness in diverse contexts, great attention was paid to implementation infrastructure. Using the analogy of music, one can imagine the difficulty in playing a piece of orchestral music one has not heard in its entirety. For this to happen, it is helpful to have ongoing concerts that others can attend; to be able to train master conductors and musicians who will have had experience with the musical work and then can go back and teach it to others; to have the capacity to send out conductors and musicians to local settings to assist them in learning to play; to help them make modifications in light of their own orchestral strengths and weaknesses; and to avoid making modifications that will change the nature of the composition.

A Social Problem Solving Unit was created within the University of Medicine and Dentistry of New Jersey and its affiliated mental health center. The unit's mission is to foster effective implementation of SDM/SPS programs in school districts nationally and internationally, with an action research orientation. Many of the principles of effective implementation in multiple settings that we discussed in this chapter grew out of the experiences of this unit. The SDM/SPS program and implementation unit gained formal recognition from the National Mental Health Association, the National Diffusion Network of the U.S. Department of Education, and the National Education Goals Panel, critical steps in building credibility and opening up contacts with networks of potential and actual implementers from which further refinements in practice and sources of implementation support could be derived.

Evaluation data about implementation of the SDM/SPS Project are available from three major studies. Commins and Elias (1991) undertook an examination of the first four sites to implement the SDM/SPS program. The methodology involved identifying 10 key conditions most likely to facilitate long-term program implementation and comparing the sites on relevant indicators. The two districts showing all 10 conditions were found to have made substantial progress toward institutionalizing the program. A district showing 9 of 10 conditions had made substantial progress. The remaining site met only 4 of 10 conditions and showed almost no progress. This study was the first to show that the program could be

disseminated effectively. Anecdotally, it is worth noting that 11 years after the Commins and Elias (1991) study, SDM/SPS had a clear, visible presence in both districts that earlier had met all conditions, had been integrated into the elementary guidance program in the district that met 9 of 10 conditions, and continued to be implemented only on a sporadic basis in the remaining district.

Heller and Firestone (1995) conducted a study of the sources of leadership in schools that had implemented long-term social and emotional learning programs. As part of this study, nine elementary schools that had implemented SDM/SPS for at least three years were identified. An interview procedure was set up to determine the degree of institutionalization of the program. They found that five of nine schools had institutionalized the program to a significant degree. Four were deemed fully institutionalized, meaning that all teachers were using the program with high fidelity. One was designated as mixed because it had a core group of teachers that were high-fidelity users of the program along with other less rigorous users, and four had a partial status, meaning that they maintained affiliation with the SDM/SPS programs and teachers were using the program, although in generally limited, low-fidelity ways.

Detailed analysis of mediating factors indicated that full institutionalization was related primarily to consistent filling of leadership roles by multiple individuals, usually from varied job titles, and to having school-based SDM/SPS coordinating committees. The teachers played the most critical role in institutionalizing SDM/SPS programs. In every school, long-term, high-fidelity institutionalization was more likely when there was an active group of teachers who implemented the program and knew its impact. Essential among the activities of such groups were providing a sustained vision of the program, offering encouragement, and setting up in-house procedures to monitor its progress and improve its effectiveness (Heller & Firestone, 1995)..

As the SDM/SPS program expanded through involvement with the National Diffusion Network, trainers were bringing the program to sites inside and outside its New Jersey base. Beyond a focus on implementation, we felt it was important to examine the extent to which teachers and student recipients of the program were developing their skills to the same degrees that they did in the initial validation sample. In the initial samples, of course, the program was smaller, there were fewer implementation sites, and program management was closer and more intensive. For the more recent study, three new sites in New Jersey plus sites in Arkansas and Oregon were studied.

Results are summarized in Bruene-Butler, Hampson, Elias, Clabby, and Schuyler (1997). Briefly, extent of teacher acquisition of skills in dialoguing and facilitative questioning met or exceeded those of the original sample in all of the new sites. Comparing the Oregon and the original New Jersey site, use of inhibitory questioning strategies declined from pretest to posttest; use of facilitative (discussion-oriented) questioning increased greatly. With regard to acquisition of interpersonal sensitivity, problem analysis, and planning skills, students in all of the recent dissemination sites showed significant gains during the program, and the effect sizes in all cases were equal to or as much as twice as large as those in the original validation sample. The Bruene-Butler et al. (1997) data suggest

that the implementation of the SDM/SPS program in sites assessed in 1994 and 1995 can occur in ways that allow its impact on teachers and students to be as strong as it was in the initial implementation site, where it was begun in 1980.

Extension to Disadvantaged Urban Settings

The next challenge has been the application of the SDM/SPS approach to an urban, economically disadvantaged school setting. These districts are currently under unprecedented pressure to meet mandates to raise standardized test scores. These efforts have crowded out programs directed at social-emotional and character development. Yet educators also recognize that education is an interpersonal process, occurring in relational contexts and mediated by social-emotional skills. This demands coordination of any SEL or related program with the constraints, and strengths, of urban schools. Few validated social competence or character programs have been systematically applied in urban districts, especially over a period of seven years. Further, there are challenges involved in coordinating programs to allow continuity, synergy, and going to scale with fidelity across multiple schools.

The setting for our work has been Plainfield, New Jersey, an urban setting with a demographic profile that began as 95 percent African American and 5 percent Latino students, shifting to 70–30 percent over seven years. It was deemed a special needs district by the state of New Jersey. Our partnership with Plainfield began in 1998, when the Rutgers Social-Emotional Learning Lab Team approached the superintendent and other administrative staff to discuss a way to address continuing academic and behavior difficulties among students. We spoke in terms of using Price's action-research model as a guide to our collaboration. Agreement was reached on implementing a coordinated, districtwide social-emotional learning initiative, reflecting an analysis of the problem of poor academic performance and high levels of problem behavior and the solutions available to impact on modifiable risk factors. The Plainfield Board of Education adopted a policy concerning Social-Emotional Learning (SEL) for all of its public schools, and accompanied this policy with a vision statement expressing their commitment to the social and emotional development of their children, youth, families, and staff. This policy stated the value position that students' low academic performance is unlikely to transform without also improving their SEL skills.

A full discussion of this aspect of the project is beyond the scope of this chapter, but several important points can be illustrated. First, the existence of a sound curriculum, such as SDM/SPS, is necessary but not sufficient. The curriculum must be modified to be culturally appropriate. Further, for urban schools, it must be linked to mesh with the various mandates, especially those concerning literacy. Second, there must be a distinctive, developmentally sequenced, nonrepetitive curriculum that is capable of being implemented across all grade levels with fidelity despite high levels of student and teacher turnover. Third, a strong implementation support system must be put in place. Finally, there must be a feasible and ongoing procedure for monitoring, evaluation, feedback, and program

modification. This last element is very important; for instance, the rapid rise in the proportion of Latino/a students created a need for ongoing monitoring and changes in the cultural grounding of the program.

Mandates   The overall umbrella concept of SEL is integrated and monitored within several of the district goals and curriculum standards of the Plainfield Public Schools. It is critical that prevention/promotion programs in schools are related to state and local mandates governing that school. In Plainfield, these mandates included the Abbott/Whole School Reform (WSR) requirements, the New Jersey Core Curriculum Content Standards (NJCCCS), and the New Standards Performance Standards (NSPS). As noted on the website of the Plainfield School District, each of these influences provides a particular set of directions and constraints for the school system. WSR is a set of stipulations required of the 30 districts in New Jersey that have been designated as "high risk" under *Abbott v. Burke* litigation. Each school in these districts must select, adopt, and sustain an approved whole school reform model and then devote the full resources necessary for its proper implementation. Literacy and mathematics, the areas in which standardized testing takes place every year, are emphasized. Any SEL curriculum must be aligned with the district's literacy goals, pedagogy, and implementation plans. Formal and informal lessons have been aligned with specific literacy standards that are a pivotal part of the WSR in Plainfield. A key vehicle for the articulation of literacy and SEL has been the Laws of Life program (see www.lawsoflife.org for more information), which engages students in grades 2 and above in a developmentally appropriate process that results in their writing or using other modalities to express the laws and values that guide their lives (Elias, Bryan, Patrikakou, & Weissberg, 2002). Laws of Life provides a character- and values-linked continuous thread that allows for unified school-wide program-related activities across all grade levels. NJCCCS refers to the set of curriculum standards for all subject areas in schools, adopted by the state of New Jersey. NSPS refers to performance standards in academic areas to which Plainfield is also held accountable. The Board of Education passed a districtwide SEL policy, stating the importance of SEL as part of the core mission of academic education. The five skill areas of SEL (see Chapter 10, Figure 10.1) are aligned with academic standards explicitly named and monitored in two of the six district goals (Goal 1: Student Achievement and Goal 5: Staff) and implicitly in four goals of the Plainfield Accountability System for school administrator performance.

Curriculum   In the first year, we collaborated to design and pilot test a variation of the SDM/SPS curriculum, "Talking with TJ," in three of the elementary school's second and third grade classrooms (Dilworth, Mokrue, & Elias, 2002). "Talking with TJ" is a video-based curriculum that provides students with the opportunity to learn and practice prosocial skills. The premise revolves around the fictional T.J., a Black teenage girl who appears in all of the videos as a radio station disc jockey running a radio talk show. Kids call in for advice about solving typical problems faced by children their age pertaining to acceptance issues, difficulty

expressing feelings, and difficulty compromising. Subsequent action-research cycles have led to curriculum development. An overall emphasis in grades 2–3 was Teamwork and in grades 4–5 was Conflict Resolution, with character-linked thematic emphases also created for each grade level. A series of topical modules to build readiness skills was created for grades K–1 as well as a supplemental small group intervention for young students with early reading difficulties. After five years, another problem-solving-oriented curriculum, Overcoming Obstacles, was brought in for grades 6–12 and is now being subjected to the action-research cycle. Naturally, as mandates change, curricula and related programming must also be adapted.

Implementation Support   Support must be provided at multiple ecological levels. At the administrative level, the superintendent assigned the areas of SEL and Character Education to a special projects coordinator, who was designated the SEL administrative liaison. In this capacity, she worked closely with both the building and district-level administrators as well as SEL staff at the building level. Site coordinators were established in each school building to help with all aspects of implementation. An examination of the role functions of the site coordinators at the elementary school level provides good overall insight concerning the structure of intervention supports:

- monitor implementation of curricula
- foster a positive greeting process each school day, overall and in individual classrooms
- coordinate ways in which curriculum principles can be carried out within the Literacy Block of the Whole School Reform model
- ensure skill-building posters remain on the walls at all times
- encourage practice of skill-building principles in the classroom when children are in group/pair/team situations
- facilitate writing of Laws of Life essays
- collaborate with school staff to create buildingwide applications of SEL, including integration into school discipline procedures
- encourage outreach to parents

A Social Development Coordinating Committee determined overall direction, training, and resource allocation. Note that the term *Social Development* was chosen so that the work of the committee could encompass SEL, character education, and emerging bully/violence prevention mandates. The committee was chaired by the administrative liaison and included at least one member from each elementary school serving as the SEL site coordinator, support staff from secondary schools, some teachers and SEL district administrators, and representation from the Rutgers SEL Lab Team. Initially, team members provided onsite assistance to teachers implementing the curriculum as well as to site coordinators working with buildingwide SEL initiatives; this support, which at its height included using as many as 50 trained undergraduates, faded gradually.

Monitoring and Evaluation   A collaborative process between the Social Development coordinating committee and the Rutgers team was used to set goals and develop instruments and reporting systems for feedback (Bryan, Schoenholz, & Elias, in press; Romasz, Kantor, & Elias, 2003). An ongoing problem is the dual nature of data analysis for professional publication purposes and the amount, format, level, and timing of data needed for district-based decisions related to program implementation support and resource allocation. After Year Six of the collaboration, all data systems were turned over to the school district for their subsequent use.

Case Example: Concluding Perspectives

What is the essence of this case example? It chronicles the use of a social decision making approach informed by community psychology principles and implementation considerations, including the prevention and implementation considerations, the four stages of development of innovations, and the Conductor's Guide to Orchestrating Prevention/Promotion Innovations (Table 11.4). The SDM/SPS process by necessity has been context sensitive and operator dependent while trying to remain faithful to basic program principles. The emphasis has been on implementing core features while adapting its methods to diverse host settings, including the challenges of the urban schools. In the spirit of continuous improvement, SDM/SPS developers and adopters conduct ongoing action research to maximize its effectiveness and serve a broad range of populations and settings. Additionally, the uncertainties and adventuresome nature of this kind of work are embraced and become vehicles for deepening the collaborations involved in all community endeavors. The action research process and its related considerations are, in fact, at the core of what community psychology has to contribute as a discipline. There are no shortcuts; every accomplishment, every small win (Weick, 1984) and baby step (Cowen, 1977) is celebrated as a positive action, an instructive example, and part of moving problem prevention and competence and health promotion from rhetoric to reality.

FINAL THOUGHTS, FUTURE THOUGHTS

Conditions like violence, abuse of alcohol and other drugs, AIDS, academic failure, school disaffection and dropout, homelessness, prejudice, and child abuse and neglect require bold, definitive, effective, widespread, sustained efforts. What is at stake is the future health of our youth and what they will become when they are in a position to take over the responsibilities of citizenship in a democracy.

Community psychologists worry when the spread of prevention/promotion innovations is approached naively, unrealistically, or misleadingly. All too often, the result is failure and fatalism about resolving future community problems. There are no shortcuts, inoculations, or preventive approaches that can succeed in the absence of careful oversight, continuous monitoring, and feedback. Policy advocacy

also is required if implementation of prevention is to reach the point of having a widespread impact on public health.

The SDM/SPS Project is an example of how health promotion and risk reduction programs can be brought into schools and implemented with integrity, skills acquisition, and generativity in multiple contexts. Space did not allow us to describe initiatives in other community settings, but review the programs in Chapter 10 to understand and imagine the impact of widespread implementation on families, neighborhoods, workplaces, and other settings.

Ultimately, if we do not implement prevention/promotion innovations with care, we are likely to see public interest diminish. Documentation of process and outcomes in ways that policy makers, the public, professionals in caregiving fields, and scientists can all use with confidence is a high priority. Understanding how operator-dependent innovations can be implemented widely in everyday contexts poses intellectual and practical challenges that must be met if we are to have health-enhancing communities. For these reasons, the considerations about program planning and evaluation in Chapter 14 become especially important for the future of the prevention/promotion field.

CHAPTER SUMMARY

1. Successful prevention/promotion programs cited in research journals are not necessarily successfully replicated in multiple settings or sustained over time. Effective, sustained programs in schools have active administrative support, ongoing staff training and support, and integration of the program into the life of the school (see Table 11.1).

2. Action research is a cyclical approach to developing prevention/promotion programs and transferring them to multiple settings. The process of spreading an effective program to many settings consists of four stages: *experimental development, technological application, diffusion of innovation,* and *widespread implementation.* This process is sometimes termed *scaling up.*

3. Many effective prevention/promotion innovations, in schools, workplaces, and other settings are not widely implemented. We used Kelly's ecological concepts of interdependence, resource cycling, adaptation, and succession to explain why encouraging innovation within the context of the local setting is so important.

4. Seven characteristics describe prevention/promotion innovations and the settings where they usually take place (see Table 11.2). Innovations are *operator dependent, context dependent, organizationally unbounded,* and *fragile and difficult to specify.* Effective innovations thus require *identifying core and adaptive components, challenging* the setting while also respecting its key qualities, and *longitudinal* attention to program quality. *Small wins* are often more feasible and accepted in settings. To be effective and sustained, the program or innovation

must be *institutionalized,* made a routine part of the setting's functioning. Because of these factors, prevention advocates must have or acquire specific skills in order to put in place successful, enduring innovations.

5. There are numerous challenges in implementing prevention programs effectively. To meet such challenges, Table 11.3 lists ten considerations in planning and implementing prevention/promotion innovations. Implementing these through action, research, and reflection is termed *praxis.* It concerns both "what you do" and "how you do it."

6. Approaches to exemplary education programs have evolved from *cookbook, replication,* and *adaptation* approaches to an emphasis on *invention/innovation.* Implementing an invention/innovation approach requires taking the developmental levels of implementers into account, such as a desire for generativity in one's work.

7. On the basis of an invention/innovation approach, we presented a Conductor's Guide to Implementing Effective Prevention/Promotion Innovations in Multiple Settings. These guidelines are listed in Table 11.4.

8. The *Social Decision Making and Social Problem Solving Project* is an example of a long-term prevention/promotion effort that has encountered many of the challenges of implementation and has attempted to address them using the principles outlined in this chapter.

9. There is no magic formula for successful widespread implementation of a model program; however, a process of continuous monitoring, feedback, and modification, respecting local ecology and needs of implementers, encouraging diverse inputs, and building a sense of community, allows innovations to have the best chance to adapt to their environments.

BRIEF EXERCISES

1. Recall a prevention/promotion educational program you have experienced. This may, for instance, involve drug abuse prevention, parenting skills classes, conflict resolution training, a program teaching social or communication skills, or other intervention. Using the concepts in this chapter, analyze the quality of its implementation.

    First, use some of the seven characteristics in Table 11.2 to describe this program.

    - Was it operator dependent and context dependent? How?
    - Were its effects organizationally unbounded? How?
    - What were its core and adaptive features, as you perceive them?
    - Do you believe the program was implemented effectively? What factors influenced whether it was effective or not?
    - Was the program evaluated and improved longitudinally?

Second, if possible describe the educational effectiveness of the program using terms from Table 11.3.

- Did it use appropriate instructional strategies? For instance, did it use group discussion, exercises to apply learning, and other ways to strengthen learning?
- Were its materials (e.g., written, visual, computerized) user friendly and helpful?
- Was the organization or setting genuinely committed to the program (hospitable context)?
- What were the constraints, limitations, or obstacles to program implementation? How could these be overcome?
- What persons provided resources of talent, commitment, or other qualities that strengthened the program?
- What aspects of the program would you change or improve? Why?

2. This chapter focused on educational settings. List some other KISS and AID systems, or other systems in society, that are operator-dependent, context-dependent systems whose effects are organizationally unbounded and difficult to specify.

   In what respects might health care, retail sales and services, finance, computer technology, religion, politics, and diplomacy represent such systems? Justify your opinion with recent news stories or with your own experiences.

3. Imagine that you have just been hired as the director of the counseling center at your college or university. While continuing to offer its existing services, you want to take a stronger prevention/promotion approach to serving the campus community. Describe specific innovations and programs that you would develop to pursue this goal.

RECOMMENDED READINGS

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Collaborative for Academic, Social, and Emotional Learning [CASEL]. (2003). *Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs*. Retrieved from http://www.casel.org.

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Novick, B., Kress, J. S., & Elias, M. J. (2002). *Building learning communities with character: How to integrate academic, social, and emotional learning*. Alexandria, VA: Association for Supervision and Curriculum Development.

Osher, D., Dwyer, K., & Jackson, S. (2004). *Safe, suppportive, and successful schools step by step*. Longmont, CO: Sopris West.

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RECOMMENDED WEBSITES

Community Tool Box
http://ctb.ku.edu

> Resources for planning, implementing, and evaluating community initiatives, including prevention/promotion.

New Century School House
http://www.landmark-project.com/ncsh

> A project that asks educators to visit a 1960s-style school building gutted of all relics of industrial age learning and suggest ideas and plans for what space, materials, and learning should look like to build children's competencies for the future.

Center for Effective Collaboration and Practice
http://cecp.air.org

> Information and resources on established, effective programs for children and youth.

The Eleven Principles of Character Education Sourcebooks and Institutes
http://www.character.org/files/home/htm

> Comprehensive guide to implementation of high-quality character education programs

INFOTRAC® COLLEGE EDITION KEYWORDS

action research, dissemination, experimental social innovation and dissemination, implementing(ation), intervention, prevention(ive)(ing), primary prevention, promotion(ing)