CHAPTER 26

What Everyone Should Know About Implementation

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Authors of almost every chapter in this volume discuss implementation in one way or another, suggesting the need to devote special attention to this important topic. *Implementation* can be defined as "efforts designed to get evidence-based programs or practices of known dimensions into use via effective change strategies" (Damschroder & Hagedorn, 2011, p. 195). This definition seems straightforward. An evidence-based program has been shown to be effective elsewhere through careful evaluation; others find out about the program and want to use it in their setting, so they can obtain similarly positive results. Unfortunately, experience suggests that this translation from research to practice does not always go well because many programs are not implemented well enough in new settings to achieve their major goals. There can be many explanations for this. Sometimes, staff members are not sufficiently trained to execute the new program correctly; other times, they decide on their own to change the program substantially in structure or application from its original version; and at still other times, the new program may be unexpectedly shortened or even stopped entirely due to various administrative or practical issues. In other words, in many cases, the new program does not bear a close enough resemblance to the original version, so it is not surprising that poorer results are obtained.

These possible scenarios highlight an important aspect of Damschroder and Hagedorn's (2011) definition: Implementation occurs through the use of "effective change strategies." Effective implementation does not occur naturally or spontaneously but requires the use of systematic methods specifically designed to increase the odds of program success. To apply these methods, we need to understand what are the important elements or aspects of implementation, what steps should be taken to promote effective implementation, and what factors influence the implementation process for good or ill. These are the main issues I discuss in this chapter.

A Brief History of Implementation Research and Practice

Work on implementation can be traced back nearly 100 years due to its early focus on helping farmers learn and apply scientifically based agricultural practices (Rogers, 2003). However, implementation did not receive much attention in the social sciences until the late 1970s and early 1980s, when its importance was noted in the application of educational and psychosocial interventions for youth. There has been an exponential increase in implementation theory, research, and practice within the past 10–15

years, and the field has now developed into a full-fledged scientific undertaking due to the contributions from multiple disciplines.

Implementation is important for all types of organizations, programs, and populations. It is worthy of attention whether one is working with schools, mental health clinics, public health or health care organizations, businesses, governments, or social service agencies that are serving children, families, or adults. Moreover, implementation is important for both prevention and treatment. In summary, implementation is now receiving its due as an important area of theory, research, and practice that affects all types of interventions. The multidisciplinary research on implementation that has been conducted to date informs relevant research and practice on social and emotional learning (SEL) programs, which are the focus of this chapter.

In this chapter I present and briefly discuss 11 important findings about implementation, followed by brief discussion of several critical issues that need to be explored further and clarified in future research and practice. It is my hope that this method of presentation not only provides a user-friendly perspective on current research and practice on implementation relevant to SEL programming of all kinds but also offers suggestions for how to move the field forward. Several additional resources offer excellent review or commentary on various issues related to implementation (e.g., Bopp, Saunders, & Lattimore, 2013; Damschroder, Aron, Keith, Kirsh, Alexander, & Lowery, 2009; Domitrovich et al., 2008; Dusenbury, Brannigan, Hansen, Walsh, & Falco, 2005; Glasgow, Green, Taylor, & Stange, 2012; Humphrey, 2013; Johnson, Hays, Center, & Daley, 2004; Moore, Bumbarger, & Cooper, 2013; O'Donnell, 2008; Stirman et al., 2012).

Major Findings in Implementation Science

Quality Implementation Is the Sine Qua Non of Effective Programs

This is perhaps the most important of the established facts about implementation. There is now clear evidence that high-quality implementation (see below) is strongly associated with positive program outcomes (Durlak & DuPre, 2008). The converse is also true; low-quality implementation is usually associated with programs that have minimal or sometimes no positive effects. Moreover, quality implementation has strong practical consequences for schoolchildren as suggested by one review of over 200 SEL programs (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). When students involved in well-implemented SEL programs were compared to those in poorly implemented SEL programs, the former group demonstrated academic gains that were *twice* as high as those in the latter group. Furthermore, the levels of emotional distress and conduct problems noted in the former students were only half as large as those displayed by students in the latter group. School personnel need to understand they must invest in quality implementation in order to achieve better results. In summary, we should not think of programs by themselves as being effective; it is the *well-implemented* programs that are effective.

Monitoring Implementation Is an Essential Component of All Program Evaluations

Program outcomes cannot be interpreted appropriately without information regarding the level of implementation that was achieved. It is especially important in the face of negative results because a program that would otherwise be successful can produce poor results when it is poorly implemented. Even with positive program outcomes, measuring levels of implementation is important because these data provide information about what is needed to achieve a program effect and how the impact might be improved with even better implementation. Thus, monitoring implementation is vital for assessing a program's true value and can offer valuable guidance in terms of continual program improvement.

It Is Extremely Costly to Ignore Implementation

Another way to view the value of implementation is to consider the decision-making process commonly faced by virtually every school. Schools have limited resources and

school personnel must make careful decisions about what programs to offer. Should they offer a new program or not, and, given alternatives among new programs, which one should they choose? These decisions should always be based not only on a program's potential impact but also in reference to the likelihood of achieving quality implementation. Schools experience serious short- and long-term costs if they do not conduct well-implemented programs.

The money, resources, and staff time spent on poorly implemented programs will be wasted because such programs are not likely to be successful. Furthermore, following poor results, school staff members are also likely to form erroneous beliefs, such as "SEL programs do not work," which limit their willingness to undertake related programs in the future.

Therefore, school personnel should not conduct an evidence-based SEL program unless they are committed to achieving quality implementation. Although quality implementation does not guarantee program success, without it, success is highly unlikely. In summary, a proper focus on implementation advances research, practice, and educational policy because it can lead to better decision making and better services for schoolchildren.

Implementation Is a Multidimensional Concept

Implementation of evidence-based programs or practices can be done a number of different ways. At least eight different components of implementation have been identified: fidelity, dosage, quality of program delivery, participant responsiveness, program differentiation, monitoring of control or comparison conditions, program reach, and adaptation (for definitions, see Durlak & DuPre, 2008). Each of these components combines to affect quality implementation. Although fidelity and dosage have been the most studied aspects, others also merit attention. For example, quality of program delivery refers not only to how well an initial lesson is presented but also to methods that promote the generalization and application of newly learned skills (Domitrovich, Gest, Jones, Gill, & DeRousie, 2010). "Participant responsiveness" (sometimes called "engagement") refers to how well a program stimulates the interest and holds the attention of participants. A program may look ideal on the drawing board, but if it does not effectively engage its audience, its impact will be diminished or nonexistent. Because of this, when a new SEL program is being considered, it is a good idea to solicit input from those who will be involved (i.e., teachers and students) to gain a good sense of how well the materials, activities, and goals of the program will effectively motivate and engage the target audience. This can be particularly important when the program is being offered to ethnically or culturally diverse students.

Implementation Exists along a Continuum

Implementation is not an all-or-nothing construct; rather, it exists in degrees along a continuum. For example, with respect to dosage, the continuum can range from 0% implementation (a new program is never begun) to 100% (indicating the entire program has been administered). Another way to view this continuum is in terms of *quality*, which can generally be defined as conducting the intervention along its multiple dimensions (dosage, quality, fidelity, etc.) at a level that provides the best chances that the program will be effective (i.e., that maximizes the benefits that can be attained by its participants). In other words, one can think of low, medium, and high levels of quality implementation. As noted earlier, levels of implementation can vary because teachers may decide to omit or change some parts of the intended program (i. e., make adaptations) when they are deliver it to their students.

Adaptations Are Common and May Improve Program Outcomes

Most new programs that are conducted in schools represent a blend of fidelity and adaptation. *Fidelity* refers to delivering the active ingredients of an intervention, that is, those elements that are crucial to producing intended effects. These active ingredients are what "power" the intervention and make it work. When new programs are tried, these ingredients (also sometimes called "core components") are what should be repli-

cated. *Adaptations* refer to changes made in the original program. Adaptations are commonly made in schools because practitioners perceive that the change is necessary for the program to fit in relation to the school's capacity, resources, and operational features, or to meet the cultural values and life experiences of its staff and student body. Program features that are commonly modified include the exact timing and duration of program lessons; some of the specific activities, examples, language, or exercises in the lessons; and the pacing of the program, depending on student needs. *As long as the active ingredients of a program are retained*, it is acceptable to make adaptations such as these to suit the ecology of the school. In other words, any adaptation made to a program should be intentional. Program changes should not be undertaken merely because of personal preferences, and they should never undermine or interfere with the program's theoretical or empirically determined active ingredients (Moore et al., 2013).

In fact, some modifications may be necessary in order to gain the sufficient commitment and engagement of school staff to try the program in the first place because some aspects of the intended program may not fit with the school's culture and customary practices. Adaptations are not necessarily an alarming development because research suggests that well-planned adaptations can *improve* program impact (Durlak & DuPre, 2008). In addition, research clearly indicates that school staff members routinely adapt new programs in some fashion or another, with or without the guidance of program developers and researchers (Ringwalt et al., 2003). Finally, other research has clearly indicated for quite some time that flexible interventions (i.e., those that can adapted in some ways) are more likely to be widely disseminated and used by others (Rogers, 2003). In summary, to ensure the appropriate blend of fidelity and adaptation in new programs, it is important that those bringing the program into schools (funders, researchers, or original program developers) collaborate with staff in the host setting to determine an acceptable way to decide on the proper blend of fidelity and adaptation.

Effective Professional Development Services Are Essential for Quality Implementation

Just as quality implementation is the sine qua non of effective programs, good professional development services are the sine qua non of achieving quality implementation. Professional development services that comprise preprogram training plus ongoing technical assistance appear to be a requisite for implementing an evidence-based program or practice well. Fortunately, there are several available options for these kinds of services, although more are needed for truly widescale dissemination throughout our nation's schools (see *www.casel.org* and Durlak, 2013, for a partial listing of resources). School staff members cannot learn how to deliver a program effectively if they only participate in an informational workshop or simply read a training manual. They need the expertise of others who are familiar with the approach. Consultation with others helps school staff members learn things such as the core theory behind the intervention and its active ingredients, how to deliver the intervention appropriately in different situations, when repeating parts of the program is warranted, and what modifications are acceptable and perhaps necessary in fitting the intervention to a particular setting. The use of personal coaches (i.e., trained and experienced consultants) to help teachers and other school staff achieve quality implementation has been a growing feature of several successful professsional development efforts (Becker, Darney, Domitrovich, Keperling & Ialongo, 2013).

Multiple Factors Affect Implementation

Table 26.1 lists examples of 23 factors that research reviews have identified as influencing implementation (Domitrovich et al., 2008; Durlak & DuPre, 2008; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Greenhalgh et al., 2005). These factors are present at multiple ecological levels. For example, some occur at the societal or communitywide level (e.g., educational policies, political pressures, funding); others are characteristics of either the intervention (e.g., its complexity or flexibility) or the frontline providers who are to deliver the program

TABLE 26.1. Examples of Factors That Influence Quality of Implementation

1. Community-level factors
   a. Theory and research in the relevant area
   b. Political/administrator pressures
   c. Funding
   d. Educational policy and curriculum mandates

2. Characteristics of staff delivering the program
   a. Perceived need for the program
   b. Perceived program benefits
   c. Sense of self-efficacy or self-confidence
   d. Mastery of new skills

3. Features of the program to be offered
   a. Compatibility or fit with the host setting
   b. Flexibility or adaptability of the program

4. Features of the host school and its operating systems
   a. Positive work climate
   b. Organizational norms related to openness to change
   c. How well the program fits with usual school practices
   d. Shared vision regarding buy-in and commitment to the new program
   e. Shared decision making and supporting collaboration among stakeholders
   f. Working partnerships with other agencies
   g. Effective communication practices
   h. Effective formulation of workgroups and tasks
   i. Strong leadership
   j. A program champion advocating for the program
   k. Administrator support

5. Features of Professional Development services
   a. Quality of preprogram training
   b. Quality of ongoing technical assistance

Note. Based on Durlak and DuPre (2008).

(e.g., their openness to change and general attitudes about the program, their sense of self-efficacy, and their ability to master or blend new skills into their everyday duties and responsibilities). These factors can also be organizational elements, that is, parts of the systems or structures that are either created within the school that is hosting and delivering the program (e.g., leadership, climate, morale, or organizational capacity) or that are established to provide professional development services to members of the host organization (e.g., characteristics of training and ongoing technical assistance). The importance of professional development services has already been covered, and space does not permit discussion of all the other relevant factors. Some factors are mentioned in the next section when I describe the various steps of the implementation process.

Each ecological factor exists in degrees (rather than simply being present or absent) and can be viewed as either hindering *or* promoting quality implementation, depending on its features and amenability to change. For example, policies that support and encourage schools to choose evidenced-based programs are likely to lead to eventual improvements in school curricula. However, if those same educational policies do not support schools' attempts to secure sufficient professional development to achieve quality implementation, then positive changes in school services will be very slow to arrive, and they may not occur at all.

There Are at Least 14 Related Steps to Achieving Quality Implementation

Because implementation is so important to effective programs, it is imperative to understand what specific steps should be taken to achieve quality implementation. A research review that synthesized the available literature on what it takes to achieve quality implementation found that (1) there is considerable agreement among different authors from multiple disciplines and research areas about the existence of at least 14 critical steps, and (2) these steps may be divided into four sequential, or temporal, phases (Meyers, Durlak, & Wandersman, 2012). This synthesis of the important steps in implementation was called the quality implementation framework (QIF) and described the tasks that should be undertaken at each step. A major implication of this framework is that quality implementation involves a coordinated series of related plans and actions. In fact, one startling finding was that 10 of the 14 identified steps should be completed *before* implementation begins. Convergent validity for the QIF comes from the fact that its 14 steps target the ecological factors

that affect implementation as determined by other independent research studies, as noted earlier.

In brief, the steps in the four stages of quality implementation can be illustrated by listing some of the questions that should be answered at each step. The first stage of implementation comprises eight steps and is largely guided by the results of different assessments designed to examine how well the planned intervention fits the school setting, and the school's readiness to host the intervention. For example, how well does the program respond to the needs of the staff and student body, and to its own mission and values? Are the staff members' expectations for what the program can accomplish realistic? To what extent does the school have sufficient capacity to deliver the program successfully (see Wanless et al., Chapter 24, this volume) Should the program be modified in any way, and if so, how should this be done without changing the program's active ingredients? Are the staff and school administrators genuinely supportive of the intervention? Will there be effective leadership at the school for this program? Can the school arrange for effective preprogram training?

The second stage comprises two steps related to creating the appropriate structure for implementation. Two important questions at this stage are (1) "Who will be members of the team whose responsibility is to monitor implementation?" and (2) "Can a realistic plan for implementation be created that specifies the duties and responsibilities of these team members?"

It is only after the first two stages and their corresponding steps are satisfactorily completed that the third stage of actual implementation begins. This stage involves providing ongoing technical assistance to frontline providers and developing mechanisms to collect information on implementation and offer supportive feedback on how well implementation is proceeding. These steps are important, so that the level of implementation can be quickly improved if necessary, and unanticipated obstacles or problems can be resolved. Therefore, some important questions to answer involve determining how implementation will be monitored, and how helpful feedback can be delivered periodically to various stakeholders about the progress of implementation.

The last stage in quality implementation comprises a single but important step related to improving future program applications. This step involves critical reflection and analysis of the program and its implementation. The central question is "What have we learned about conducting this program in this setting?" Supplemental and related issues involve consideration of factors that have affected program implementation both positively and negatively, and how the delivery of the program and its outcomes can be improved. Useful information on these matters requires open communication channels among all participants (e.g., those providing professional development services, school administrators, frontline providers, and, depending on the circumstances, funders, students, and their parents).

Some Qualifications

Experience suggests that the number and sequence of some of the 14 steps can be modified in certain situations. For example, some steps may have to be revisited (e.g., because of turnover among school administrators or leadership, or if commitment to the program diminishes), and others can be skipped in the presence of positive information (e.g., the school has obvious capacity and commitment, and has already carefully assessed its needs). Nevertheless the QIF offers useful guidance for future research and practice by describing the coordinated set of actions associated with achieving quality implementation and the planning that needs to occur to attain this end. Most notably, program implementation should not begin before several preliminary but necessary steps have been taken to increase the odds that implementation will be effective.

Quality Implementation Requires Collaboration among Multiple Stakeholders

Achieving quality implementation is the mutual responsibility of many groups, and each has a critical role to play. Some of these groups include state and federal agencies that mandate school practices and curricula; funders who finance new initiatives; and researchers, theorists, and program developers who are keen to produce the most effective and efficient programs. Others

with important roles to play include school officials and administrators who must give school staff sufficient time and support to learn and practice new techniques through thoughtful professional development, and, of course, the frontline school staff members who must commit the necessary time and energy to delivering the program effectively. This latter group, in particular, can provide vital input into what is practical in each situation, such as what aspects of professional development are most helpful or unhelpful for them, and what modifications could be made in the program to improve its expected results. In summary, policy, theory, research, administration, and practice must come together to work synergistically in order to maximize program implementation.

The Same Factors That Influence Quality of Implementation Also Influence Sustainability

Sadly, sometimes even effective programs are discontinued after their trial period, and it is only recently that more attention has been given to sustaining SEL programs that work. The same factors mentioned previously in relation to quality implementation also affect whether a program will continue in a setting after its initial trial period is over. For example, if factors related to quality implementation are not favorable in the first place, such that the program is not a good fit for the school, sufficient buy-in and commitment is not obtained, or effective leadership is missing, then the implementation and impact of the program will be greatly diminished, and the motivation and required effort to continue the program are much less likely. Even if these factors remain positive (i.e., the staff members want to continue the program) subsequent events could interfere with program continuance. Several factors that deserve particular attention in order to increase the chances of sustaining programs include staff turnover, leadership, program costs, and new administrative mandates.

Staff turnover of both administrators and teachers can be high, depending on the situation, so as new staff members enter the school system, there is a need to orient them to the program and obtain their support. New teachers need to be trained to deliver the program, and this usually entails further financial costs for professional development. If turnover has affected those who provided strong program leadership (administrators and teachers), then the new personnel will have to be brought on board to support the program and provide the necessary leadership. Finally, schools may be pressured to respond to new mandates for curriculum changes that might interfere with the prior operations of the SEL program.

Therefore, it is important to anticipate potential problems and plan for program sustainability *at the outset*. In other words, taking the necessary steps toward quality implementation should include a discussion about what happens after the new program ends, and this discussion should be part of the *initial* collaboration with school staff. Whenever possible, initial discussions with involved stakeholders should involve obtaining their commitment to an empirical approach in educational programming by considering the results of both program implementation and program outcomes. These commitments should include finding ways to support a successful program using local budgets rather than depending on outside sources of financial support. Fortunately, sustaining the program often involves lower financial outlays than the initial program implementation because fewer new staff members need training and professional development, and the curriculum materials have already been purchased and are on hand. Planning for sustainability illustrates another instance of the importance of effective leadership. If the school or district leaders perceive new programs to be of value, they are much more likely to find the money to sustain them.

In summary, if stakeholders have committed to trying an evidence-based program, planning carefully to achieve quality implementation, evaluating the level of implementation obtained along with program outcomes, and then using the collected information to make further decisions, in effect, they have adopted a problem-solving approach using the scientific method. When considering the possible results of both the implementation process and program outcomes, there are usually four major options to consider: (1) continue the program as is because implementation was good and the

program has achieved its primary objectives; (2) continue the program and try to improve it because although implementation was good, the program was only partially effective in achieving its goals; (3) continue the program but improve implementation as needed to provide an adequate test of the program's impact; and (4) discontinue the program because although implementation was good, the program was not at all effective, and search for another evidence-based program that suits the school's needs. Schools' adoption of this systematic approach would represent a radical departure and a decided improvement on current educational practices, which are rarely data-driven. The ultimate result is that more evidence-based programming would occur in schools, and ineffective programs would be replaced and eliminated.

In his survey of SEL programs that have been continued, stalled, or discontinued over time, Elias (2010) noted the importance of several factors associated with sustainability that have already been discussed (e.g., good initial training, ongoing technical assistance, and the importance of administrative leadership). He also emphasized two additional factors: (1) Teachers who emerge as positive role models for others can sustain the school's commitment and motivation, and (2) programs that are integrated and become part of the entire school and its daily practices, as opposed to being operational in only some classrooms, are more likely to continue.

Although our understanding of the issues related to quality implementation has increased substantially in the past few years, there are still several questions and issues for future exploration. Some of the major ones are discussed next.

What More Do We Need To Learn about Program Implementation?

Each of the following issues is an empirical question that seems best answered through carefully conducted research studies that combine the efforts of theorists, funders, administrators, researchers, and practitioners. Interventions must be studied under the real-world conditions that exist in various schools, and it should be remembered that school staff members are in the best place to offer essential feedback about what is practical and doable under different circumstances.

1. What are the thresholds for achieving quality implementation for different SEL programs? Implementation does not have to be perfect, but we do not know how imperfect it can be before SEL programs will not produce their intended goals. Research on the Life Skills Program indicated that a 60% level of implementation is associated with positive outcomes (Botvin, 2000), but the best implementation threshold is likely to differ across programs because of their varied target groups, contents, and objectives. A higher threshold might be required depending on the educational level of the students, their prior experiences, or current skills levels, for programs promoting different SEL skills, or for those interventions placing a higher priority on academic, personal, or social outcomes.

2. How can we design the most effective and efficient mechanisms to provide effective professional development services? Is it possible to individualize these services to take into account staff turnover and the individual needs of current staff with different learning styles and needs? How can technology be best used in delivering either or both initial training and ongoing technical assistance once the program is begun (e.g., through the Internet, using virtual reality classrooms, or mobile apps)?

3. How do the different aspects of implementation influence each other and program outcomes? For example, how do dimensions such as quality of delivery, fidelity, adaptation, and dosage interact? Would enhancing the quality of delivery of program components reduce the necessity of providing all program sessions (i.e., make it possible to reduce program dosage), or would enhanced delivery (or fidelity, or adaptation) increase program effects with more sessions?

4. How can we assess how the presence *and* levels of different ecological factors affect the process and final quality of implementation, and how do these different factors interact to influence implementation? For example, what are the best ways to assess a school's and its students' needs? What can

we do to obtain sufficient buy-in under unfavorable conditions (i.e., when political, fiscal, or administrative pressures create strong barriers toward moving forward)? Can the presence of an internal champion override an initial lack of full buy-in or commitment by constantly encouraging and motivating staff members? How can teachers overcome the lack of sufficient support from their key administrators? In determining program fit, *how much* fit, in terms of such factors as perceived need, staff buy-in, and the like, is necessary and sufficient to achieve quality implementation?

For example, in a study of Providing Alternative Thinking Strategies (PATHS), Kam, Greenberg, and Walls (2003) found that principal support was a crucial factor that interacted with the quality of program implementation to affect student outcomes. Only in those PATHS schools in which principal support was high did students demonstrate significant changes in their social competence and classroom behavior. Chaudoir, Dugan, and Barr's (2013) review of over 100 measures that have been used to assess the various ecological factors believed to affect implementation provides a perspective on how others have sought to measure different influences on implementation.

5. What are the active ingredients of evidence-based programs? There have been very few attempts to confirm empirically the influence of the presumed active ingredients of interventions. As a result, promotion of programs often is based on their *presumed* mechanisms of change by relying on either theory or logic models. It is essential that we discover the true active ingredients of different interventions in order to improve program implementation, efficiency, and effectiveness. Doing so would have strong future implications. Knowing an intervention's active ingredients would (a) influence how and in what ways programs could be adapted for different circumstances; (b) improve professional development services because it would pinpoint what skills school staff must have to conduct the program with quality; and (c) improve program efficiency and therefore make more programs attractive to others (e.g., some programs would be simpler to learn and briefer to conduct, which would reduce program costs by eliminating some program materials, some parts of professional development, and the time and effort expended by school staff in delivering the program).

6. How can we better articulate the various decisions and specific actions that should be taken to accomplish each step associated with quality implementation? Although the QIF described earlier provides an outline of the behavioral steps involved in reaching quality implementation, we need more specific information about how best to act to accomplish each step efficiently and most appropriately. Some research groups have developed practical approaches for various organizations whose application are likely to be very helpful in this regard (see, in this volume, Fagan, Hawkins, & Shapiro, Chapter 31, and Wright, Lamont, Wandersman, Osher, & Gordon, Chapter 33). What are the most efficient and valid ways to assess the various aspects of implementation? For example, levels of implementation tend to vary over time, so a single assessment is unlikely to provide a complete picture of attained implementation. However, it is unclear how often and in what ways implementation should be assessed. Dusenbury and colleagues (2005) provide a useful discussion of evaluating multiple components of the implementation of school-based programs using different assessment methods. Scientific progress requires accurate measurement of relevant constructs, so it is important to develop assessment tools and procedures that can evaluate the process and final results of implementation efforts. Moreover, it would be ideal if assessment tools were easy to use in everyday school practice.

The preceding issues are unlikely to lead to a single resolution but must be qualified by many circumstances, including the program's goals, contents, characteristics of a school and its student body, as well as the prevailing political and social environment. In general, the field will advance when the previously discussed issues are explored carefully in order to answer the following overarching question: How can various stakeholders work collaboratively to achieve quality implementation that is associated with what particular outcomes for which students?

Concluding Comments

At first glance, the challenges involved in achieving quality implementation may seem daunting. For example, the eight aspects of implementation, the 23 ecological factors affecting implementation, and the 14 steps involved in achieving quality implementation would seem to lead to an overwhelming number of possible permutations to consider and study. Furthermore, there is the need for multiple stakeholders, who typically do not collaborate well with each other, to learn how to work together to achieve the same end. In general, it seems that there is too much we do not know and too many obstacles to overcome.

Nevertheless, many schools have successfully implemented SEL programs. There has been tremendous progress within the science of implementation in the past few years, and there are several positive signs that this progress will continue. There are now journals exclusively devoted to implementation (i.e., *Implementation Science, www.implementationscience.com*) and several other outlets, such as those published by the American Psychological Association, that require data on implementation to be provided for publication. Policy, research, and practice are also beginning to be combined to support implementation. For example, governmental agencies in both the United State and the United Kingdom are now supporting special initiatives focused on implementation (Meyers et al., 2012), and an implementation training institute has been established in the United States (Proctor et al., 2013).

Things that are unknown or complicated do not deter progress in a scientific field; they actually serve as a catalyst for leaders' curiosity and creativity, and motivate others who are willing to take on challenges if something is important. Implementation is very important, and dedicated stakeholders can and will advance our understanding of what it takes to deliver SEL programs in ways that will bring maximum benefits to students.

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