

# Best Practices in Developing Prevention Strategies for School Psychology Practice

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## OVERVIEW

For evidence that prevention has become a major role and activity for school psychologists, school psychologists need to look no farther than a comparison of the National Association of School Psychologists' (NASP) own policy documents over the first decade of the 21st century. In NASP's (2000) *Professional Conduct Manual: Guidelines for the Provision of School Psychological Services*, the first reference to some form of the word *prevent* occurs 10 pages into the document. By contrast, NASP's *Model for Comprehensive and Integrated School Psychological Services* (NASP, 2010) references *prevention* on its first page: "School psychologists provide services to schools and families that enhance the competence and well-being of children, including...*prevention of academic and behavior problems* [emphasis added]..." (p. 1), and includes Preventive and Responsive Services as one of its five categories of Direct and Indirect Services.

The professional literature in school psychology has seen a steady growth in prevention-focused articles, chapters, and books. Since the publication of *Best Practices V*, there have been 101 articles (about 9%) addressing prevention in the primary school psychology journal literature, contrasted with 87 (8%) and 52 (7%) such articles in the preceding two 5-year periods (according to an ERIC search for articles with *prevention* as a descriptor in seven school psychology journals for three 5-year periods from 1998 to 2012). Recent years have seen the publication of edited volumes devoted entirely to prevention authored by recognized scholars

in school psychology (e.g., Doll, Pfohl, & Yoon, 2010). The purpose of this chapter is to provide a broad overview of prevention as a major role for school psychologists and to present best practices for choosing and implementing prevention programs in schools.

Before continuing a discussion of prevention, we must start with a definition and some terminology. Notwithstanding the common usage that prevention refers to stopping something from happening, defining prevention with regard to psychological practice and research has been both difficult and contentious. For the purposes of this chapter, we define prevention both as interventions (a) that decrease the incidence (number of new cases) or prevalence (number of current cases) of some clearly defined, undesirable outcome (e.g., below-standard academic achievement, inappropriate special education placement, bullying, or suicide), or (b) that strengthen resiliency.

Prior to the mid-1990s, nearly all writings on prevention used a three-part terminology: primary, secondary, and tertiary prevention. Some authors continue to use this scheme. Beginning in the mid-1990s the prevention literature began to use terminology promoted by an Institute of Medicine report that focuses on which segment of the population an intervention targets: universal, selective, or indicated. The Institute of Medicine terminology corresponds closely to the now well-known three-tiered model used throughout many NASP publications. Simply put, the Institute of Medicine terminology and the three-tiered model correspond as follows (Institute of Medicine first;

three-tiered model second): universal → universal interventions; selective → targeted interventions; and indicated → intensive interventions. Terminology from the three-tiered model will be used throughout this chapter.

### Need for Prevention Programs

Policy makers in education and mental health increasingly embrace prevention programs based on at least four rationales: (a) the recent development of numerous evidence-based prevention programs, (b) promotion of the well-being of youth, (c) resource limitations stemming from a complete reliance on treatment-oriented models, and (d) cost effectiveness. First, and perhaps most important, the number of evidence-based prevention programs has grown exponentially over the past 25 years. In its 1988 seminal publication on such programs, the American Psychological Association identified only 10 programs for children and youth that were evidence based (Price, Cowan, Lorian, & Ramos-McKay, 1988). Now hundreds of prevention programs are identified as evidence based (Cooney, Kratochwill, & Small, 2010), including programs that address academic and mental health goals. For example, Dombek and Connor (2012), in a study using randomly assigned matched schools, found that providing individualized reading instruction based on assessment results reduced the first-grade retention rate by nearly 50%. Likewise, prevention programs focused on social-emotional and behavioral outcomes have produced very positive results in terms of strengthening competencies and reducing problematic behavior (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Second, the potential to enhance the well-being of school-aged children by preventing academic, social, and behavioral problems has an inherent appeal to school psychologists. If large numbers of children can receive high-quality early educational experiences and mental health support, then the need for remedial interventions should decline. The idea of reducing the incidence and prevalence of academic and behavioral problems is at the heart of current thinking about school psychology practice, whether through the response to intervention (RTI) or the broader public health models. A preventive approach presumes that by providing appropriate levels of universal and targeted group interventions, the number of individuals needing Tier 3 intensive individualized interventions will be reduced.

Third, 4 decades ago, George Albee (1968), inarguably the key early figure in prevention psychology,

theorized that there will never be adequate numbers of direct-service mental health providers to treat all individuals in need of services. Albee concluded that prevention services provide the only feasible way to reach all individuals in need. In most areas of the United States the school psychologist-to-student ratio exceeds, or far exceeds, the NASP-recommended standard of 1:1,000 (Curtis, Castillo, & Gelley, 2012). Attempting to treat all students in need of school psychological services on an individual basis imposes an impossible task on school psychologists. Integrating prevention activities into their practice can help school psychologists to meet service demands. Finally, prevention programs can be cost effective. For example, studies indicate that programs that reduce outcomes such as school dropout rates or youth substance abuse may return financial benefits many times the cost of implementing the prevention program (Cooney et al., 2010).

Both leaders and practitioners in school psychology recognize the need for prevention as a major role for school psychologists and have done so particularly over the last decade. The 2002 Multisite Conference on the Future of School Psychology (Cummings et al., 2004) identified as one of its four underlying principles the recognition of a need for a greater emphasis on prevention and intervention. Of the 2002 conference's resulting 15 prioritized goals for a national agenda, three specifically target prevention issues. Ten years later the 2012 School Psychology Futures Conference continued this strong focus on prevention. Six of the seven 2012 conference's keynote or featured speakers (H. Adelman, B. Doll, J. E. Lochman, L. Taylor, R. Horner, and R. Weissberg) are known primarily for their work in prevention areas. As practitioners, school psychologists appear to be increasing their involvement in prevention activities. The most recent survey of NASP members indicates that school-based practitioners, on average, may be spending as much as one third of their time working to improve outcomes for all students and for those identified as being at risk (Castillo, Curtis, & Gelley, 2012), whereas earlier surveys showed much less such involvement.

### Types of Prevention Programs

Prevention programs can be categorized according to scope or according to targeted domain. A program may focus on the individual person, be ecologically focused, or focus on multiple levels (Elias & Branden, 1988). In terms of targeted outcomes, historically school-based prevention programs have primarily targeted either

academic or social–emotional domains. More recent prevention programs have adopted an integrative approach that simultaneously targets both domains.

### **Scope**

Until recently, school psychologists likely were most familiar with person- (student-) focused programs, as they were historically the most commonly used type of prevention programs. Such programs typically use individual or group interventions focused on changing some aspect of the individual student. Person-focused programs target an array of intended outcomes; for example, increased academic skills (e.g., *Individualizing Student Instruction*; Connor, Morrison, Fishman, Schatschneider, & Underwood, 2007), changed social information processing (*STORIES*; Teglasi & Rothman, 2001), or altered discrete social behaviors (*Skillstreaming*; McGinnis, 2011). The unifying characteristic here is that individuals are targeted for change with little focus on changing anything on a broader level. Person-focused interventions apply to all tiers of a multitiered service delivery model but, when considered as a preventive intervention, are found at the universal and targeted interventions levels. For example, *Second Step: Student Success Through Prevention* (Committee for Children, 2008) is a person-focused prevention program used school-wide, whereas *Skillstreaming* is more typically delivered to small groups of students identified as being at risk (targeted intervention tier).

By contrast to person-focused programs, ecologically focused programs emphasize the need to have an impact on various layers of the student's environment to prevent or treat learning, social, emotional, and behavioral difficulties. Based broadly on an ecological framework, these programs assume that layers of the environment have differential effects on individual students. Though such programs were less well known until recently, many school psychologists now are familiar with ecologically focused programs. For example, *Fast Track* (Conduct Problems Prevention Research Group, 2011) is a well-researched prevention program to reduce conduct disorders that includes parent groups, parent–child sharing time, and home visitations as after-school and outside-of-school components, as well as an in-school focus on developing students' social and emotional competencies, and teacher classroom management.

### **Targeted Domains**

There is a tendency in school psychology to equate prevention solely with programs that focus primarily on

social–emotional or mental health goals. This is inaccurate. Although it is true that much of the prevention literature has this focus, universal interventions to strengthen early academic skills and targeted interventions for those students at risk for school failure (e.g., *Head Start*) are clear examples of prevention programs focused on academic outcomes. Indeed, RTI can be characterized as a prevention-oriented system that most frequently targets academic outcomes. Academic prevention programs, such as instructional support teams, can be inexpensively implemented and used as instructional interventions aimed at preventing serious learning problems. An excellent example of a prevention program with an academic focus, *Individualizing Student Instruction* (Dombek & Connor, 2012), is described later in this chapter. School psychologists, with expertise in assessment and progress monitoring, are highly qualified to advocate for preventive instructional practices.

School-based social–emotional and mental health prevention programs focus most typically on the development of social competence by focusing on discrete skills (e.g., *Skillstreaming*; McGinnis, 2011); a social problem-solving model that enables students to make prosocial, functionally effective choices in interpersonal situations (e.g., *I Can Problem Solve*; Shure, 2001); or by altering social cognition (e.g., *STORIES*; Teglasi & Rothman, 2001). As mentioned above, some of these programs include work with families as well as with individual students (e.g., *Conduct Problems Prevention Research Group*, 2011).

## **BASIC CONSIDERATIONS**

It is critical to consider the quality and evidence base for any prevention program before its implementation. School psychologists can now marshal substantial evidence in support of the effectiveness of prevention programs. The literature on the effectiveness of early intervention to promote academic success both universally and with targeted interventions is too vast to review here, even illustratively (see chapters on academic interventions in this edition of *Best Practices*).

Effectiveness research on prevention programs that target social, emotional, and behavioral outcomes is readily available. A recent meta-analysis of 213 universal (Tier 1) school-based social and emotional learning programs supports their effectiveness (Durlak et al., 2011). Universal social and emotional learning programs were found to have moderate positive effects (mean effect size [ES] = .57) on social and emotional

learning skills and small, but meaningful, positive effects (mean ES = .23–.24) on positive social behavior, reduction of conduct problems, emotional distress, and attitudes. Importantly, these programs also demonstrated a small (mean ES = .27) positive effect on academic outcomes, although they were focused primarily on social and emotional learning goals. Programs led by classroom teachers were, on average, at least as good as those led by nonclassroom personnel.

Evidence also supports the effectiveness of social and emotional learning programs for targeted (Tier 2) interventions. In a study of 80 such programs, Payton et al. (2008) found medium to large positive effects for social and emotional learning skills (mean ES = .77), other social–emotional outcomes (mean ES = .38–.50), and, again, academic outcomes (mean ES = .43). Other meta-analyses similarly have found positive results of intensive interventions for externalizing behavior problems both for individual interventions and group interventions, although individual interventions outperformed group interventions for the indicated population (Wilson & Lipsey, 2007).

Although thoroughly researching any program before adopting it is highly recommended, practicing school psychologists may not have time to conduct comprehensive literature searches in order to identify effective programs. So, it is helpful to know where to more easily obtain such information. Fortunately, there are several

sources, two of which are highlighted here. For academic interventions, school psychologists may find the Institute for Education Sciences' What Works Clearinghouse (<http://ies.ed.gov/ncee/wwc>) to be a valuable resource. The What Works Clearinghouse reviews evidence on intervention programs in education, with a heavy focus on literacy and math programs, and presents charts that evaluate the amount of evidence regarding a program's effectiveness and a measure of the degree of effectiveness indicated by the available evidence. For social–emotional programs, the Collaborative for Academic, Social, and Emotional Learning (CASEL; [casel.org](http://casel.org)) reviews numerous prevention programs with regard to preset criteria and provides information on selected social and emotional learning programs for preschool and elementary school use. Table 10.1 summarizes the CASEL, What Works Clearinghouse, and two other Web-based sources of information on school-based prevention programs and their effectiveness that provide helpful guidance to school psychologists and school administrators. Numerous other Web-based compendia are available on specific prevention topics (e.g., teen pregnancy prevention, [http://www.hhs.gov/ash/oah/oah-initiatives/teen\\_pregnancy/db/programs.html](http://www.hhs.gov/ash/oah/oah-initiatives/teen_pregnancy/db/programs.html)), that can be found easily by searching the Internet. However, caution is required. Each compendium uses its own guidelines for review and ratings of programs. Consumers need to

**Table 10.1. Selected Sources of Information on Efficacy of Prevention Programs**

Source	Age/Grade Levels	Prevention Program Information Provided
Collaborative for Academic and Social Learning Guide 2013 ( <a href="http://casel.org/guide">http://casel.org/guide</a> )	Pre-K–5	Reviews 24 social and emotional learning programs selected to meet preset criteria. Information on each program includes descriptions and ratings of program design and implementation support and of the evidence of the program's effectiveness.
Substance Abuse and Mental Health Services Administration National Registry of Evidence-Based Programs and Practices ( <a href="http://www.nrepp.samhsa.gov">http://www.nrepp.samhsa.gov</a> )	Early childhood to young adult	Includes reviews of more than 120 school-based prevention programs, sortable by race/ethnicity, gender, age, setting (urban, suburban, rural, tribal), outcome type, and program focus. Entries for each program include program description, ratings of the quality of the research evidence and readiness for dissemination, and information on costs.
Office of Juvenile Justice and Delinquency Programs Model Programs Guide ( <a href="http://www.ojjdp.gov/mpg">http://www.ojjdp.gov/mpg</a> )	Early childhood to young adult	Includes reviews and ratings of more than 160 school-based prevention programs, sortable by race, gender, age, setting (urban, suburban, rural, tribal), problem behavior, and program type. Entries for each program include program description, evaluation methodology and outcomes for one or more studies, references to the literature on the program, and an effectiveness rating of <i>promising</i> , <i>effective</i> , or <i>exemplary</i> .
What Works Clearinghouse ( <a href="http://www.whatworks.ed.gov">http://www.whatworks.ed.gov</a> )	Pre-K–12	Reviews effectiveness of school-based intervention programs, including prevention programs, in both the academic and social/emotional (student behavior) domains. Includes specific category for dropout prevention.

review carefully each system's selection and evaluation criteria when considering the evidence provided by any of these sources. A good strategy for such review would be to consult several compendia and then consider the evidence as presented by more than one site.

Irrespective of what compendium of evidence-based programs is used, consideration of the compendium's criteria for inclusion and evaluation of evidence is critical. A program in one compendium might not even make the cut for another, or simply was not reviewed. Compendia also evaluate programs on differing outcomes or program characteristics. The Society for Prevention Research (<http://www.preventionresearch.org>) has developed a comprehensive set of standards for evaluating prevention programs' evidence of efficacy, effectiveness, and readiness for broad dissemination (Flay et al., 2005). School psychologists would do well to consult these standards before making a final decision on adopting a given program. Notwithstanding the importance of supportive evidence provided by experimental research, it is also critical to recognize that the implementation of prevention programs is highly contextual. Rigorous local program evaluation is essential for success.

Research on prevention indicates that there are several features of prevention programs that are likely to lead to successful outcomes (CASEL, 2012; Greenberg et al., 2003; Nation et al., 2003). These features are highlighted in Table 10.2.

### Knowledge and Competencies

Following NASP's Practice Model (NASP, 2010) requires that school psychologists have basic competencies in

prevention programming. Although NASP added this explicit expectation only in 2010, well-prepared and experienced school psychologists need not think of the implementation of prevention programs as requiring something substantially outside of their already-acquired competencies.

Many skills necessary for implementing prevention programs are competencies that have been at the core of school psychology practice for many years. Particularly relevant are competencies related to data-based decision making and accountability, consultation and collaboration, school and systems organization, policy development and climate, and program evaluation, all of which should seem familiar to most school psychologists. Depending on the target of a prevention program, interventions and instructional support to develop academic skills, and interventions and mental health services to develop social and life skills likely will inform the program's substance.

Most school psychologists considering involvement in prevention will be stronger in some of these competencies than in others. A careful approach to prevention work does not require expert-level competence in all of these areas. However, school psychologists whose current competencies focus nearly exclusively on psychoeducational assessment and/or direct services with students will need to acquire broader competencies before launching into prevention efforts. Workshops provided by NASP or other organizations can be used to strengthen such competencies. Partnering or consulting with colleagues who may have strengths in various areas is an excellent way to meet all of the skills that may be required without having to master all of the competencies oneself.

**Table 10.2. Critical Features of Successful Prevention Programs**

- *Program type/outcome match:* Programs may be differentially effective for particular outcomes (e.g., ecologically focused interventions may work particularly well for reducing substance abuse and delinquency).
- *Sufficient length:* Programs need to be long enough to accomplish what needs to be accomplished. Many programs are simply too short. Programs may also need booster sessions at later points after completion. Multiyear programs are especially desirable.
- *Appropriately timed:* Programs should be initiated early enough to have an impact on the development of the problem.
- *Socioculturally relevant:* Programs should be sensitive to the needs and cultural norms of the participants.
- *Comprehensive:* Programs using multiple interventions across multiple settings (includes both a person focus and an environmental or organizational change focus) are likely to be most successful.
- *Incorporate a variety of methods:* Programs should include sequential skills training with active student learning.
- *Structured manuals/curricula:* Programs should support consistency in delivery.
- *High quality implementation:* Programs should require staff to be well trained. This likely will require both initial and follow-up training for staff who join the program after its initial implementation.
- *Evidence of effectiveness:* Programs should provide clear research-based evidence of effectiveness that allow consumers to make deliberate choices regarding program adoption.
- *Outcome evaluation included:* Programs should have methods for formal evaluation of processes and outcomes.

## School Variables

It would be naïve to believe that all schools are equally amenable to prevention programs or to prevention as a major role for the school psychologist. Several school-level variables contribute to implementation. First, the school's mission will affect the acceptability of prevention efforts. Universal prevention programs targeting social-emotional areas will be most successful in schools that include broad mental health goals as a stated mission (Elias & Branden, 1988). Universal or targeted preventive interventions targeting academic mastery are likely to be acceptable in nearly all schools.

Second, communication among staff will affect the fidelity of program implementation. Successful prevention programs are multifaceted and require that each component be implemented consistently and effectively. It is necessary, then, that administrators, teachers, support staff, and, when necessary, parents communicate about which program components are easily implemented and which are less feasible.

Third, higher parent involvement in the school's initiatives can improve prevention program success. Strong support for a program at home and at school can improve students' knowledge of the issue and attitude toward the program, and provides accountability for student behavior and involvement.

Fourth, competing initiatives within the school should be considered and, where present, can be dealt with by combining initiatives. For example, if a school desires to improve school climate and reduce bullying, the prevention program can combine the common goals and practices inherent in these initiatives, such as teaching school-wide expectations and establishing consistent consequences.

Fifth, a school's available resources are a key consideration and are detailed later in the chapter.

## BEST PRACTICES IN DEVELOPING PREVENTION STRATEGIES

As an overall starting point, school psychologists should consider prevention strategies and programs using the tiered interventions model. This model provides guidance for evaluating potential problems and selecting suitable interventions.

### Planning and Selecting Prevention Strategies and Programs

Prevention programs are most effective when tailored to the school's unique environment, resources, and needs.

Prior to selecting a program, school psychologists should conduct a needs assessment—a systematic assembly and evaluation of school-specific concerns and potential causes of these concerns—to determine what, if any, problem to target.

Needs assessments can range from informal (e.g., recognizing a need for a bully prevention program following numerous incidents of in-school bullying) to formal (e.g., a structured survey for students addressing major areas of concern in a school). While many types of needs assessments can be conducted in a school setting, surveys, by interview or questionnaire, are most commonly used. Highly structured questions, paper- or Web-based questionnaires, are most efficient when surveying large numbers of individuals. By contrast, interviews can provide rich qualitative information from a relatively small number of respondents. School psychologists may also assess needs by pulling information directly from the materials students are using. Although many school staff members may participate in creating a needs assessment, school psychologists, trained in research and evaluation methods, are highly qualified to conduct and evaluate such assessments.

Beyond providing insight into what school-specific problem should be addressed, results from a well-developed needs assessment help school psychologists and other school staff members determine at which level of implementation a prevention program will have the greatest impact. For example, if the results of a needs assessment indicate a school-wide issue with bullying, the prevention program should target the entire school. On the other hand, if the results indicate a problem only within a specific grade, the program should target only that grade. Determining the target level of an intervention can be challenging, but understanding school resources, and garnering the buy-in of administrators, can make this determination easier.

School psychologists should not rely solely on results of a needs assessment to select a prevention program. It is equally critical to consider whether the proposed prevention activities are appropriate for and suit the school environment. The suitability of a proposed prevention program is influenced by available resources, staff competencies, and how well the proposed activities mesh with the educational philosophy and general climate of the school and community. Designing school-based prevention programs that are highly congruent with the school's mission or culture can increase the acceptance, sustainability, and fidelity of the program (Biggs, Vernberg, Twemlow, Fonagy, & Dill, 2008). Some ways to do this might include (a) designing a

program that is a regular component of the ongoing educational process, (b) integrating the activities into the school routine (e.g., a character education program that is a part of the language arts curriculum), and (c) focusing initial prevention efforts on targeted early interventions for at-risk students, rather than beginning with universal interventions because early interventions have greater acceptance. In addition, prevention work will often be more visible and acceptable if tied to tangible school outcomes (e.g., absenteeism, tardiness, or improving social relationships).

Once the school psychologist has completed the analysis of needs and fit, these results must be communicated to critical stakeholders in the adoption and implementation of the program. Effective implementation of prevention programs often requires the buy-in of multiple stakeholders. Well-developed communication skills and materials that support the need for and the evidence base of a prevention program are important components of a successful meeting with key decision makers. If a school-level prevention program is needed, the school administrators should understand the large impact that the program may have on the school environment and that school psychologists are prepared to be at the forefront of establishing and evaluating such programs. If administrators recognize the potential and provide support for such prevention programs, they can promote the idea to other school personnel and students' families (Biggs et al., 2008). If programs at the classroom level are needed, then the school psychologist can help teachers understand the importance of, and evidence base for, such programs. In these situations, the school psychologist can also provide meaningful information about how the program can be relevant for the teacher's classroom or department.

### **Implementation**

Innovation requires leadership. Some school psychologists may already work in schools where prevention programs are institutionalized and an accepted part of the school's role. For others, a transition to target prevention will require considerable leadership. Johnson, Hays, Center, and Daley (2004) presented "champion roles and leadership actions" (p. 143) as one factor that is needed to initiate and sustain prevention programs. Research consistently emphasizes the importance of influential, proactive leaders in effective implementation and sustainability of interventions: "Formal and informal leaders within adopting systems, as well as champions who proactively promote an

innovation from inside or outside of a system, are critical to creating an environment that supports and facilitates sustaining innovations" (Johnson et al., 2004, p. 143).

### **Leadership Issues**

When establishing new prevention programs, a core group of decision makers can provide a strong leadership structure. However, involving key stakeholders and offering leadership roles to future implementers of the program may increase program support and sustainability. Moreover, involving key leaders can help overcome barriers or resistance to new programs. School psychologists initiating prevention programs should seek champions for the program and support both from administrators and school staff (Johnson et al., 2004). Support from the building principal is critical. The principal can promote school-wide adherence to, and enthusiasm for, prevention programs. Indeed, without such support much success is unlikely. Further, both principal and district-level supports can increase the availability and acceptability of training for teachers and school staff which, in turn, promote effective program implementation.

### **Maintaining Implementation Integrity**

Programs work only when actually implemented and are most effective when fully implemented as planned. This common sense statement belies a critical problem with prevention and other school-based intervention programs. Many programs are either only partially implemented or are implemented poorly. For example, Biggs et al. (2008) examined teacher reports of adherence to a violence prevention program and found varied levels of implementation ranging from teachers reporting daily use to others reporting no use of the program. Inadequate implementation leads to two problems. First, if *all* elements of a prevention program are necessary to produce an effect, poor implementation is a waste of time and resources because students will benefit little from the program. Second, if an *inadequately* implemented program does not result in the desired effects, policy makers may erroneously assume that the program or similar programs do not work and, therefore, should not be attempted in the future. Essentially, there is no way to accurately evaluate a partially implemented program.

Accordingly, prevention programs should include a mechanism for monitoring implementation integrity and providing support to staff where implementation is weak. Monitoring implementation integrity can be done through assessment; that is, the nature of the assessment

is specific to the program. One common approach is to develop a checklist of required program components and then either have the implementer check off completion of each component and submit documentation to program leaders or have a program leader observe the program in action and check off appropriate completion of required program components. For example, a classroom-based, teacher-led social competency program might include as required components explanation of a skill, a wall-mounted poster reminding students of the skill, modeling by the teacher, and role-plays with feedback involving at least one third of the class. An observer could watch the teacher's session on this topic and complete a checklist regarding to what degree each of the required components actually occurred. For further examples see Castillo, Chapter 1. Although Castillo's discussion focuses specifically on multitiered support systems, the procedures are applicable broadly to school-based intervention programs.

Inservice training and ongoing consultation are ways the school psychologist can support school staff members in efforts to implement prevention programs (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Inservice training through presentations provides staff with information about the program and allows members to practice necessary skills and problem solve through potential barriers to implementation. Ongoing consultation between the school psychologist and staff members facilitates the teaching of program components, assistance in planning for the staff member's role in the program, and problem solving through barriers to implementation in a dyad rather than the group environment of inservice training. Additional strategies that promote implementation fidelity include clear communication; explicit procedure and protocols; alignment with school culture, needs, and resources; and leadership and community support.

### **Program Evaluation**

School-based prevention programs that explicitly include program evaluation procedures are more effective than those that have no such component (CASEL, 2012). Evaluation of prevention programs should include both formative and summative information. Formative evaluation refers to the collection of information while the program is being implemented and may include such information as implementation integrity, stakeholders' feedback on program operations, or assessment of intermediate goals. For example, in a

social competency development program the assessment of students' knowledge of problem-solving steps might provide corrective feedback for modifying the remaining sessions in the program. Summative evaluation refers to assessing the overall outcomes of the program. So, for the same example, summative evaluation might include an analysis of the number of disciplinary referrals for fighting before and after the program was implemented or data on the demonstrated social competency skills of students who participated in the program versus those who did not. Reporting evaluation results to school staff and parents in easily comprehensible, yet accurate, fashion is a critical piece of program evaluation. Additionally, both formative and summative evaluations need to be ongoing as the program continues to be implemented.

### **Institutionalization**

Even when they produce desirable outcomes, school-based prevention programs are too often seen as time-limited projects. While projects fade, programs that are integrated into the fabric of the school endure. Several factors are key in institutionalizing successful programs. First, school psychologists should choose programs that address identified needs and goals that are integral to the school's defined mission. For example, decreasing academic failure will always be consistent with the school's mission, but a program to decrease adolescents' depression may endure only while there is enthusiasm from a particular staff member. Second, notwithstanding earlier comments about the importance of leadership, broader ownership and active involvement by multiple stakeholders (administration, teachers, parents) is more likely to result in institutionalization. In fact, leaders should try to sell the program to such stakeholders—particularly administration—early in the process, and, if unable to do so sufficiently, reconsider whether to pursue the program. Finally, programs must be sustainable. Those that require additional financial or labor resources beyond those normally available are likely to last only as long as external funding exists. Scope is an issue, so it is important to do what can be done with the available resources or resources that are likely to be obtained.

### **Examples of Effective Prevention Programs**

Student retention is an intervention for students experiencing significant academic problems, but recent research suggests it is an ineffective intervention for



improving academic achievement (Griffith, Lloyd, Lane, & Tankersley, 2010).

### ***Individualizing Student Instruction***

Research suggests providing individualized instruction may be more effective than class-wide approaches at improving skills and, ultimately, preventing retention (Dombek & Connor, 2012). Dombek and Connor (2012) explored this possibility using Individualizing Student Instruction (Connor et al., 2007). Individualizing Student Instruction combines teacher training on software used to link assessment results with recommendations for the amount and type of instruction needed for each child with ongoing professional development. It aims to assist teachers in differentiating reading instruction and implementing evidence-based reading practices. Studies show Individualizing Student Instruction to be effective for increasing students' word recognition and passage comprehension (Connor et al., 2007). In their study, Dombek and Connor (2012) matched and randomly assigned schools to implement Individualizing Student Instruction in first-grade reading classes or to continue with business as usual. Results showed that, after a year, students in Individualizing Student Instruction classrooms were less likely to be retained than their counterparts in control classrooms. The authors suggest that when teachers possess the resources to make informed instructional decisions via effective assessments and targeted instructional recommendations, student retention decreases, making it an effective prevention program.

### ***Olweus Bullying Prevention Program***

The Olweus Bullying Prevention Program (see Olweus and Limber, 2010, for detailed description) is a universal intervention for conduct problems. Bullying in schools is a problem that has gained increasing attention from school personnel and researchers over the past several decades. While many programs exist to deal with bullying, the Olweus Bullying Prevention Program shows particular promise to decrease student's involvement in bullying. The program began in Norwegian schools in the 1980s and has since been implemented and monitored in schools in South Carolina, Pennsylvania, Washington, and California.

The Olweus Bullying Prevention Program uses a multicomponent model working at four levels of implementation: school (e.g., establish a coordinating committee, conduct staff trainings), classroom (e.g., post and enforce rules against bullying, hold class-level meetings for parents), individual (e.g., meet with

students involved in bullying, develop individual intervention plans for students), and community (e.g., involve community members on the coordinating committee, develop school-community partnerships to support the program). At each level of implementation, the program aims to reduce existing bullying, prevent future bullying, and improve peer relations at school.

As reviewed by Limber (2011), implementation of the Olweus Bullying Prevention Program in Norwegian schools has significantly decreased self-reported bullying victimization and bullying of others and has also increased student perception of positive school climate. When adapted for U.S. schools the core components of the program remained the same, but minor changes were made to implementation to suit the structure of U.S. schools. According to Limber (2011), implementation of the program in the United States has led to the following changes: significant decreases in self-reported bullying victimization and bullying of others, decreases in evaluator-observed bullying incidents, increases in student perception that teachers and other students actively intervened in bullying incidents, and increases in teacher perception that antibullying rules are clearly communicated and teacher self-confidence that they could effectively intervene in cases of bullying.

### ***Diversity Issues***

Given that diversity issues permeate all stages of prevention planning and implementation, school psychologists must consider ethnic and cultural diversity when selecting a program. A school psychologist should review literature on the program's effectiveness for the school population. In their study of school-based behavioral prevention programs for low-income urban youth, Farahmand, Grant, Polo, and Duffy (2011) found far fewer effective programs than were identified when examining programs for the whole population. Moreover, programs for low-income urban youth at a universal level were more effective than those implemented at a targeted level, a result not found when examining the effectiveness of these programs for the general population. As this study demonstrates, there is variability in program effectiveness for different populations.

Diversity issues are also important when implementing prevention programs. Aside from obvious difficulties encountered when implementing programs in settings with high populations of ethnic minorities (e.g., language barriers), school psychologists should educate themselves on the ways in which particular groups perceive the role

of the school. Some groups may be reticent to accept prevention programs targeting mental health issues if they feel that schools are not the appropriate venue for such programs. Others may not see parents or families as having a major role in prevention initiatives. For these individuals, care should be taken to present the need for prevention in a thoughtful and meaningful way. School psychologists must work hard to create an environment where community members feel their voices are being heard and their needs are being addressed to the extent possible. To do this effectively, school psychologists must be cognizant of the diversity within their schools and knowledgeable about the best ways to reach all members of the community. Further, school psychologists must recognize the role of school culture, teacher attitudes, and their own cultural identity and biases when choosing, implementing, and evaluating prevention programs (Biggs et al., 2008).

### **Issues of Developmental Differences**

During the planning phase of prevention programs, the age of the target group must be considered. The topic of the program must be developmentally appropriate if it is to be effective. For example, antibullying programs may be desirable to implement during early kindergarten and elementary school years since, for many children, this will be the first time they are spending much of their day in large groups of same-age peers, increasing the chances of bullying. Substance-abuse prevention programs, however, would be most appropriate in middle school since this is the time many students are confronted with substance use opportunities. The level of prevention program implementation can also contribute to disparate outcomes depending on age group. In their meta-analysis of school-based violence prevention programs, Wilson and Lipsey (2007) found universal programs to be more effective at reducing aggressive behavior in younger children than in older children while targeted and intensive programs more positively affected older children. As children age, their desire to be autonomous becomes stronger, potentially contributing to a greater effectiveness of prevention programs focused on the individual rather than the group during later childhood years and adolescence.

### **Overcoming Obstacles**

Potential obstacles exist to implementing prevention programs. First, there may be resistance to prevention programs irrespective of who is implementing such

programs. One of the most common negative views of prevention is a perceived lack of research support, a position that is no longer tenable. A second obstacle is administrators' often incorrect perception that special education resources, including school psychologists' time, cannot be used in prevention activities. However, since its inception, the 2004 Individuals with Disabilities Education Improvement Act (IDEA) has allowed for at least some prevention activities to be supported with IDEA funds, typically through early intervention efforts.

High student/psychologist service ratios may be a third obstacle to prevention work. School psychologists who serve several schools or who have high caseloads likely will have little time available for prevention program development and implementation. NASP recommends a ratio of 500–700 students for each school psychologist engaged in prevention, but this ratio is often significantly higher, although it has been improving incrementally over the past 20 years (Curtis et al., 2012).

A fourth obstacle is related to the perceived role of the school psychologist. Traditionally, school psychologists work primarily in special education assessment, thus administrators and staff may struggle to view them in a different, prevention-focused role and school psychologists may struggle to feel comfortable and confident expanding their role to be broader than just assessment.

Although obstacles to prevention program selection and implementation exist, there are ways to overcome them. School psychologists looking to reduce their testing role and move in more of a preventive direction may consider consultation as a starting point. Teacher consultation, most typically case centered, has emerged as the second-most common activity for school psychologists. Because training in consultation and collaboration is required for all NASP-approved school psychology training programs, many school psychologists have competencies in this area. Advocates of the consultation role stress the idea that consultation, although typically performed after a problem has been noted, inherently contains an element of prevention because helping the teacher to work more effectively with one student will likely also increase the teacher's effectiveness with future students. Furthermore, case-centered or teacher-centered consultation may evolve into systems-level consultation leading to the development of universal preventive efforts.

In overcoming obstacles related to time constraints, high student-to-school psychologist ratios, and uncertainty transitioning their roles to be more prevention-

focused, school psychologists may consider forming working partnerships with the school counselor or social worker. Through partnerships, school psychologists can work collaboratively with other professionals on prevention activities that are more distal from the school psychologist's status quo role. School psychologists bring unique skills to the table through their training in assessing need and planning for intervention. Thus, while school-wide preventive programs around mental health, where present, have typically been the province of school counselors, school psychologists can collaborate to enhance the planning, implementation, and evaluation of these programs.

## SUMMARY

Prevention is now a well-established role for school psychologists, as indicated by its emphasis in the NASP Practice Model and by the substantial growth of prevention-related works in the recent school psychology literature. As practitioners, school psychologists appear to be increasing their involvement in prevention activities.

Prevention is an intervention, and should follow the same careful steps that one would take when intervening with an existing problem. Considering the evidence base for any prevention program before its implementation is a critical first step. There is now ample evidence on the efficacy and effectiveness of prevention programs that target both the academic and the social, emotional, and behavioral domains at the universal and targeted levels of intervention. Including a robust program evaluation component is a critical piece of any prevention effort.

School characteristics are also important to consider when developing prevention activities. For example, how the school views its mission will affect the acceptability of prevention efforts, and communication among staff will affect the fidelity of implementation. Conducting a needs assessment and an environmental scan of available resources during the early planning phases can help determine what programs, if any, may work in any particular school. Critically, school psychologists must be aware of ethnic and cultural diversity when planning for and implementing a prevention program.

School psychology's long-standing broad core competencies provide well-prepared and experienced school psychologists with a solid basis for engaging in prevention. Innovation requires leadership. For school psychologists working in schools where prevention programs are a novelty, a transition to a prevention

focus will require considerable leadership. Even with good leadership this transition may be a challenge, but increasingly school psychologists are making prevention an important part of their work.

## AUTHOR NOTE

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