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A Promising Approach for Expanding and Sustaining School-Wide Positive Behavior Support

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Abstract. Educators and psychologists are concerned about problem behavior. Fortunately, effective interventions and practices have been documented for addressing this problem behavior. However, sustained and expanded uses of these interventions and practices have not been consistent or widespread. One promising approach to the systemic and sustained implementation of these practices is school-wide positive behavior support (SWPBS). The SWPBS effort emphasizes an integration of measurable outcomes, data-based decision making, evidence-based practices, and overt support systems for implementers. This behaviorally based, comprehensive systems approach is suggested as a means of achieving durable implementation of effective school-based interventions. Although the SWPBS approach is conceptually sound and comprised of supportable behavioral practices, further systems-level demonstrations and validations of efficacy, effectiveness, and expansion are recommended.

Teaching and learning in many schools are disrupted by problem behavior, like harassment, aggression, social withdrawal, and insubordination (Walker, Ramsey, & Gresham, 2005). Fortunately, the literature documents effective classroom management and school-wide discipline practices for establishing safe and effective classrooms and schools (Dwyer, Osher, & Hoffman, 2000; Mayer, 1995; Metzler, Biglan, Rusby, & Sprague, 2001; Nelson, Martella, & Galand, 1998; Safran & Oswald, 2003; Sulzer-Azaroff & Mayer, 1994,1986). This literature emphasizes neutralizing or eliminating risk factors and

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enhancing protective factors to prevent occurrence of problem behavior, reduce its incidence and prevalence, and enhance academic gains (Biglan, 1995; Gottfredson, 1997; Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Loeber, 1990).

Unfortunately, a number of factors can affect the adoption and sustained use of these effective practices. For example, recent mandates have increased expectations that schools will provide for the educational needs of all students, and create safer learning and teaching environments (e.g., Safe Schools, Reading First, No Child Left Behind, Individuals with Disabilities Education Act). Achieving these expectations is difficult in the context of shrinking resources, multiple competing and overlapping initiatives, fewer qualified personnel, and less time.

When implementation of effective practices is limited, the tendency in many schools is to adopt a traditional "get-tough" approach to managing problem behavior (Skiba & Peterson, 1999, 2000). The assumption is that responding to repeated problem behavior with increasingly severe consequences will teach students that their unruly behaviors are unacceptable and will not be tolerated. Eventually, it is assumed (hoped) that the student will "get it" and stop the displays of irresponsible behaviors. Unfortunately, evidence indicates that students with the most severe problem behavior are the least likely to be responsive to these consequences, and the intensity and frequency of their behavior is likely to get worse instead of better (McCord, 1995; Shores et al., 1993).

An alternative approach is to arrange learning environments so that students are directly taught, given frequent opportunities to practice, and receive regular and contingent acknowledgments of prosocial skills (Gresham, Sugai, & Horner, 2001; Walker et al., 2005). Greenberg et al. (2003) indicate that "school-based prevention and youth development interventions are most beneficial when they simultaneously enhance students' personal and social success, as well as improve the quality of the environments in which students are educated" (p. 467).

Over the last 15 years, greater attention has been directed toward approaches that increase the availability, adoption, and sustained use of validated practices and applying what we know about the science of human behavior to improve the effectiveness and efficiency of school systems and organizations (Carnine, 1997; Gilbert, 1978; Gilbert & Gilbert, 1992; Horner, 2003; Zins & Ponte, 1990). We propose school-wide positive behavior support (SWPBS) as a promising approach to establishing school environments that address problem behavior in a positive and preventative manner. In this article, we focus on the systemic implementation features of SWPBS as a means of increasing the accurate adoption and sustained implementation of effective behavioral practices at the individual student, classroom, and school-wide levels. We describe SWPBS, suggest how SWPBS might be implemented at broader systems (i.e., district or state) levels, and discuss research and practice implications.

Description of SWPBS

Positive behavior support (PBS) has been characterized as the integration of valued outcomes, behavioral and biomedical science, empirically validated procedures, and systems change to enhance quality of life and minimize or prevent problem behaviors (Carr et al., 2002; Sugai et al., 2000). "The foundation for *school-wide* PBS lies in the application of these features to the whole school context in an effort to *prevent*, as well as change, patterns of problem behavior" (Horner & Sugai, 2005, p. 360). SWPBS is firmly rooted in an applied behavior analytic tradition and in a solid body of research in which the focus is on the behavior of the individual and the contexts or environments in which the individual's behaviors are observed (Sugai & Horner, 2002). SWPBS emphasizes the application of evidence-based behavioral technologies in the larger context of the classroom, school, and district (Sugai et al., 2000), and is guided by three main tenets: (a) prevention, (b) theoretically sound and evidence-based practice, and (c) systems implementation.

Prevention

SWPBS operationalizes school-based prevention from a public health perspective, and emphasizes a three-tiered continuum of interventions that range from preventing the development of problem behavior (primary) to reducing the impact or intensity (secondary or tertiary) of problem behavior occurrences (Office of Special Education Programs [OSEP] Center on Positive Behavioral Support, 2004; Safran & Oswald, 2003; Walker et al., 1996; see Figure 1). Specifically, primary prevention is directed toward all students across all school settings, and involves school, family, and community members. Teaching contextually relevant social skills, providing frequent positive reinforcement for expected behavior, and arranging teaching and learning environments that discourage inappropriate behavior are emphasized (Colvin, Kame'enui, & Sugai, 1993; Lewis & Sugai, 1999).

Secondary prevention is comprised of function-based strategies that are applied to the relatively small proportion of students who require more than primary prevention support for their social success at school (Crone & Horner, 2003; Walker et al., 1996). Although they are linked to the primary-level interventions, secondary interventions are characterized as more intensive and typically involving increased adult attention and monitoring. Tertiary prevention involves highly individualized and intensive, function-based support for those students whose behaviors are unresponsive to primary and secondary interventions (Crone, Horner, & Hawken, 2004; Fairbanks, Sugai, Guardino, & Lathrop, in press). At the tertiary level, special educators, school psychologists, counselors, and behavior interventionists must have specialized competence to develop team-based and comprehensive (i.e., wraparound, person-centered) behavior intervention plans.

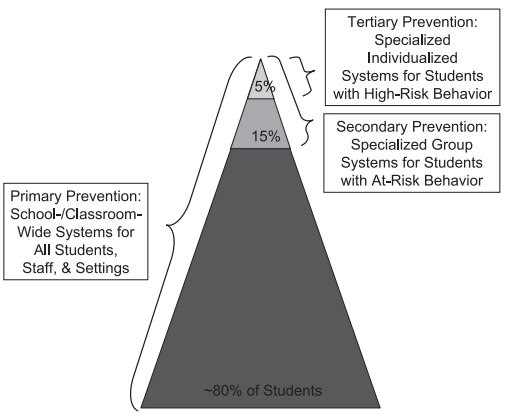

Figure 1. Three-tiered prevention continuum of positive behavior support

Theoretically Sound and Evidence-Based Practices

Unfortunately, many organizational or school-wide decisions are based on factors that are irrelevant to the effectiveness of a given practice or intervention (Carnine, 1995; Lindsley, 1992; e.g., ease of use, cost, attractiveness, social appeal, collegial testimonial). Effective organizations base their decisions on the extent to which theory and empirical evidence support those decisions (Gilbert, 1978; Gilbert & Gilbert, 1992; Elias, Zins, Graczyk, & Weissberg, 2003; Peters & Heron, 1993). SWPBS is based directly on behavioral theory (applied behavior analysis, specifically; Anderson & Freeman, 2000; Anderson & Kincaid, 2005; Carr et al., 2002), which emphasizes the lawfulness of behavior, interplay between physiology and environment, and ability to affect behavior through environmental manipulations (Alberto & Troutman, 2005; Cooper, Heron, & Heward, 1987; Wolery, Bailey, & Sugai, 1988).

Evidence based refers to practices for which verifiable information exists to support their adoption and sustained use (see Kratochwill & Shernoff, 2004, Merrell & Buchanon, 2006). When experimentally supported practices are not available, promising practices can be useful; however, adoption and implementation should proceed with caution. To avoid unforeseen negative side effects, excessive costs, and inefficient use of resources and time, promising or innovative practices should be pilot tested, and if adopted, evaluated early

and frequently. Equally important, innovative practices must be conceptually sound—that is, grounded in a theoretical model that has been experimentally validated (e.g., behaviorism; Sugai & Horner, 2002). In SWPBS, adoption considerations should be based on a documented need, and the application of four main evaluation questions:

1. Is the practice *effective*? What is the likelihood that the desired effects or outcomes will be achieved with the practice?
2. Is the practice *efficient*? What are the costs and benefits of adopting and sustaining the practice?
3. Is the practice *relevant*? Does a contextual fit exist among the practice, the individuals who will use the practice, and the setting or culture in which the practice will be used?
4. Is the practice *durable*? What supports are needed to ensure accurate and sustained use of a practice over time?

Systems Perspective

Although effective strategies exist for addressing problem behavior, their accurate and sustained implementation can be hindered by competing initiatives, overuse of reactive and exclusionary consequences, short-term use of prosocial intervention strategies, and lack of specialized capacity to educate students with the most severe forms of problem behavior (Latham, 1988; Slavin, 1989; Walker et al., 1996; Zins & Ponte,1990). Greenberg et al. (2003) suggest that successful and sustained implementation of school-based prevention and youth development programs is directly linked, in part, to schools that successfully (a) teach children social skills directly in real context; (b) "foster respectful, supportive relations among students, school staff, and parents" (p. 470); (c) support and reinforce positive academic and social behavior through comprehensive systems; (d) invest in multiyear, multicomponent programs; (e) combine classroom and school- and community-wide efforts; and (f) continue formal prevention efforts.

The SWPBS approach emphasizes the adoption and sustained use of effective behavioral practices to maximize academic and behavioral outcomes. From a systems perspective, the school is treated as the unit of analysis, and the collective actions of individuals within the school contribute to how the school, as a whole, is characterized. Horner (2003) indicated that to work effectively with the school as a whole, one must remember that organizations do not "behave." Instead, individuals within the organization engage in behaviors. The greater the extent to which these behaviors move the organization toward a common goal, the stronger the organization. In other words, an organization is defined by the extent to which the collective behaviors of an organization's membership move the organization toward the achievement of a common goal. Thus, individuals within an organization need appropriate systems-level supports to promote desired goal-related behaviors. Grimes and Tilly (1996) suggest that the ultimate goal is for school improvement to become institutionalized to the extent that

> (a) improvement is established as the school's direction; (b) agency personnel contribute to new policies that will guide services; (c) leadership provides ongoing support for innovative practices; (d) staff develop essential skills, knowledge, and attitudes; and (e) agency procedures, goals, roles, and assignments are aligned with the change (p. 466).

The systemic implementation of the SWPBS approach is guided by four elements (Figure 2). First, the school, as an organization, establishes measurable and achievable long-term outcomes (academic and social behavior targets) that are endorsed by students, families, and educators. Second, to the greatest extent possible, the school identifies practices that are supported by trustworthy, replicable, and educationally relevant evidence. Third, information or data are used to document the status of current practices, justify the need for change, and evaluate intervention effectiveness, efficiency, and relevance. Finally, the school formally establishes system supports (e.g., personnel, funding, political backing, training) to enable the accurate and durable

implementation of the practices of SWPBS. The four elements interact with and guide each other. For example, data are used to define outcomes, evaluate progress toward achieving these outcomes, guide selection of practices, and specify the kinds of supports needed to implement these practices. Similarly, outcomes are used to guide the selection of appropriate practices, narrow data collection, and judge the adequacy of existing systems. The features of a proposed systems-level approach to SWPBS are described in the following section.

Systems Application for Accurate and Sustained Implementation of SWPBS

Schools generally approach mandates to adopt new programs with cautious optimism. Given a reasonable rationale, a good-faith effort is made to prepare staff and ensure a successful initial implementation. After initial implementation has occurred and new routines are established, attention, resources, and supports are redirected toward the next challenge, initiative, or priority. Continuation of previous practices is assumed with little attention or recognition of whether implementation is accurate and outcomes are sufficient. The concern, of course, is that sustained use of practices within a school is often uncertain, and expanded use across schools within a district or state is even less assured (Adelman & Taylor, 1998; Greenwood, Delquadri, & Bulgren, 1993; Latham, 1988). Confronted by prevailing institutional routines and introduction of the next initiative, the likelihood of accurate and sustained implementation of the newly adopted program is lessened. The result is inaccurate and narrow programmatic adoption, reduced program outcomes, and limited sustained and expanded use. The following example illustrates this challenge.

A school district noted that a majority of office discipline referrals over the last semester had been for student teasing and harassment. An outside expert was contracted to provide training because of her national expertise in successfully reducing bullying behavior. The expert agreed to provide a 1-hr training event during a district-wide in-service day, and all teaching staff were mandated to attend. The expert provided an overview of strategies that have been shown effective in reducing harassment in classrooms and distributed lesson plans for each teacher to address the problem. At the conclusion of the in-service event, the expert warned that all staff must implement each aspect of the intervention according to the manual, if it is to be effective. At the end of the school year, school staff anecdotally reported that implementation was incomplete, short-lived, inaccurate, and inconsistent, if implemented at all. Their solution was to request that the expert return to provide a booster for all school staff at the beginning of the next school year.

Borrowing from Stokes and Baer (1977), this "train-and-hope" approach assumes that staff members will be adequately motivated and supported to embrace the intervention, implement it with accuracy, and sustain implementation until the problem is eliminated. The train-and-hope approach, however, is destined to fail because emphasis is *not* directed toward the establishment of system supports (e.g., resources, training, policies) needed for the accurate and continued use of the practice over time (OSEP Center on Positive Behavioral Support, 2004).

Even if successful adoption occurs at the school level, achieving expanded and adapted use of an intervention across multiple schools

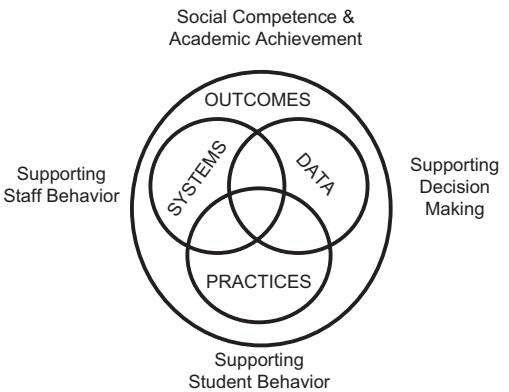

Figure 2. Defining elements of school-wide positive behavior support

is not guaranteed (OSEP Center on Positive Behavioral Support, 2004). As the number and diversity of schools increases, coordination, training, evaluation, funding, and personnel challenges can affect implementation integrity and quality of outcomes. Moreover, schools vary by location (urban, rural, suburban), size (small, medium, large, very large), organizational structure (small or large district, educational service district, etc.), local culture (e.g., race, religion, neighborhood), social economic status (advantaged vs. disadvantaged), and staff characteristics (e.g., experience, position). Many school districts and state departments of education lack the knowledge and experience required to build action plans that maximize establishment and expansion of their SWPBS initiatives.

In response to these sustainability and expansion challenges, the U.S. Department of Education, Office of Special Education Programs, established a national technical assistance center to "(a) identify and enhance knowledge about, and practical demonstration of, school-wide PBS practices, systems and outcomes along the three-tiered continuum (primary, secondary, tertiary); and (b) develop, conduct and evaluate technical assistance and dissemination efforts that allow evidence-based practices to be implemented on a large scale with high durability and effectiveness" (www.pbis.org). The Center provides technical assistance support through a collaboration of higher education institutions and a range of implementation collaborators (e.g., nonprofits, regional resource centers).

Since 1999, Center collaborators have provided technical assistance to nearly 5,000 schools representing over 30 states. From this experience, the Center has developed and programmatically evaluated a systems implementation model that focuses on the adoption and sustained use of evidence-based practices (e.g., social skills instruction, active supervision, positive reinforcement, functional behavioral assessment, proactive school-wide discipline).

The SWPBS approach is based on the assumption that formal adoption of, and long-term commitment to, evidence-based practices are linked to investments in increasing the coordination and leadership functions of local implementers. Although a traditional approach of expert staff development might be sufficient for individual schools, larger organizational units (e.g., districts, educational service districts, states) will likely need to establish an organizational structure to focus on the development of sustainable local capacity (Horner, Sugai, Todd, & Lewis-Palmer, 2005; Sugai, 2003). The goal would be to establish competent organizational units that can coordinate and manage effective and durable SWPBS systems and practices in multiple schools. In this approach, we emphasize the importance of building local behavioral competence, engaging in outcome-driven decision making, and establishing contingencies that reinforce and sustain high fidelity of implementation (Gilbert & Gilbert, 1992; Goltz, 2003; Sugai, 2003). We propose an approach led by a leadership team that coordinates local coaching, training, and evaluation activities, and establishes sustainable political, visibility, and funding supports. The relationships among the main elements are illustrated in Figure 3 and described in the following section.

Leadership Team

The establishment of a leadership team to lead and coordinate the SWPBS effort is at the core of the systems approach to SWPBS.

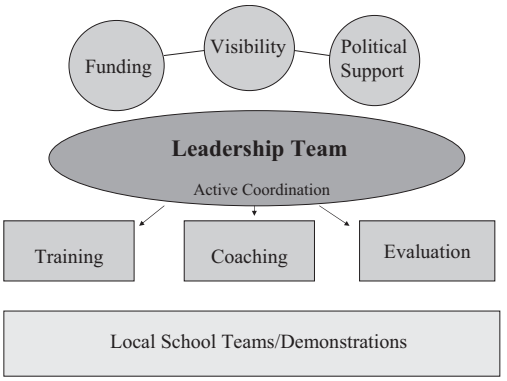

Figure 3. Organizational logic and features of positive behavior support implementation

A team-based approach is essential to increasing visibility, sustaining implementation, controlling expansion, and maximizing outcomes (OSEP Center on PBIS, 2004; Sadler, 2000; Sugai et al., 2000; Taylor-Greene et al., 1997). This team is composed of individuals who have policy and programmatic decision-making responsibilities across a range of behavior-related content areas (e.g., instruction and curriculum, safe and drug-free schools, special education, mental health, juvenile justice, Title programs). In addition, the leadership team has representation from key stakeholders (e.g., special education, general education, families, mental health, administration) who are concerned about preventing problem behavior and teaching and encouraging social skills. Administrative members might include superintendents, school board members, program heads, and directors of other initiatives. Community members might include political leaders (e.g., mayor, city council members), business owners or managers, and local community program directors (e.g., juvenile justice, mental health).

The team is responsible for coordinating six major capacity-building areas: (a) policy to institutionalize SWPBS practices and systems, (b) funding and resources to sustain long-term implementation, (c) political support and visibility to maintain priority and control expansion, (d) coaching to facilitate accurate and durable school-level implementation, (e) local training to reduce dependence on external trainers, and (f) ongoing evaluation to monitor implementation progress. To increase efficient use of limited resources, initial efforts should emphasize the integration of teams and committees that have common behavior-related purposes and objectives—for example, safe and drug free, character education, bully prevention, Title I, dropout prevention, school discipline, special education, counseling, and diversity and affirmative action. To guide this integration process, leadership considers which committees or work groups can be eliminated or combined, and directly support improved outcomes.

One of the major activities of the SWPBS leadership team is to develop an action plan that guides the systematic implementation of SWPBS systems and practices. Activities and timelines are based on regular review of behavioral and academic student data and structured staff self-assessment information. To enhance the efficiency and relevance of action planning, the SWPBS leadership team also should engage in annual self-assessments (e.g., see PBS Self-Assessment Survey, OSEP Center on PBIS, 2004) to evaluate what organizational structures, resources, and/or initiatives are perceived to be in place and need to be enhanced. Action plan activities enhance coordination and capacity building in each of the areas, shown in Figure 3.

To illustrate, one state established an action plan in which six schools in each of two school districts received 2 days of team-based training six times across 2 years. Each team was assigned a school or district support staff person (e.g., school psychologists, counselors) who served as "coach." The training of coaches coincided with team training, and coaches met monthly to review team progress and discuss strategies for maintaining the accuracy of school team implementation. Because SWPBS training expertise was not firmly established in the state, the leadership team secured an outside trainer who worked with designated state trainers to model training practices, build local training capacity, assist in preparing coaches, etc. As local capacity increased, state trainers led more team-training events, coaches worked more with the state leadership team and district coordinator, and the outside consultant role shifted to providing more traditional technical assistance (e.g., problem solving, supporting materials and strategies, data analysis and evaluation) to leadership team members and local coaches, trainers, and evaluators.

Funding

To the greatest extent possible, stable and recurring funding should be secured to support the SWPBS coordinator and the activities specified in the annual action plan. Although grant support can be useful to "seed" school reform efforts, this type of funding may

not be sustainable or replicable. Fiscal support for related behavior initiatives should be integrated based on common behavioral outcomes. For example, in one state, funding from special education, Title I, and character education were blended to support a SWPBS leadership initiative. Because improving school climate, decreasing out-of-school suspensions, improving the accurate identification of students who required individualized behavior supports, and improving the proportion of students who meet the achievement benchmarks on state-level assessments were common outcomes across the initiatives, integrating these groups into a single leadership team was logical and efficient.

Visibility

Sustained implementation appears to be linked directly to keeping stakeholders aware of SWPBS activities and accomplishments. Keeping stakeholders (e.g., district or state administrators, school board members, local politicians, parent groups) informed about implementation efforts and accomplishments is important to enhance communications and programmatic accountability, justify funding and resources, as well as acknowledge and promote successful implementations.

Visibility can be accomplished in a variety of ways (e.g., websites, newsletters, presentations, media coverage). The goal is to schedule regular (e.g., quarterly, semiannual, annual) products and events in which current activities, accomplishments, and future events are highlighted. Exemplar schools, classes, grade levels, students, and/or communities can be showcased and outcomes highlighted by displaying results that are linked to the initiative. For example, a state leadership team increased visibility of their efforts by awarding "exemplary" status to schools that exceeded implementation benchmarks and had improved school disciplinary climates (i.e., decreased school suspensions). Twice a year the team presented data to the state board of education on the progress of their SWPBS efforts, and invited a school team with exemplary status to tell their "implementation story" and show their outcome data. Because of these efforts, the state superintendent of instruction visited schools implementing SWPBS, which in turn contributed to revised legislative policy and extended funding lines.

Political Support

Although empirical support is needed in this area, political support appears to be important to sustained implementation of SWPBS initiative. Political support can be described as the actions of policy and decision makers that give the SWPBS effort high priority and enable long-term investments and expansions. Without high priority, supports for coordination, funding, coaching, training, and evaluation activities can be dispersed too broadly to adequately support implementation efforts or achieve meaningful outcomes.

High priority can be accomplished by (a) integrating initiatives that have similar goals, activities, and outcomes; (b) demonstrating a link to important and desired district, state, and federal school improvement goals; (c) providing clear evidence of the effectiveness, efficiency, and relevance of activities and their outcomes; and (d) advocating for the major need of an agenda of prevention and SWPBS. Thus, establishing priority can be supported by demonstrating how the SWPBS effort will contribute substantially to implementing the activities and achieving the goals of other high-priority initiatives. For example, No Child Left Behind, Safe and Drug-Free Schools, Reading First, and Character Education have the common goal of improving teaching and learning outcomes, especially in relation to improving classroom and school social climate and supporting students who have social skills deficits or competing problem behaviors.

Policy statements should be developed and endorsed by the leadership team and organizational leaders to positively guide and focus the improvement and support of student behavior. To enhance their utility, our experience has taught us that policy statements should include descriptions of need, rationale,

purpose and benefits, measurable outcome objectives, activities and operations for achieving these objectives, and evaluation strategies.

Training

Our experience suggests that establishing training capacity within the district, region, or state is important for sustainability, expansion, and decreased reliance on outside training expertise. Individuals who move into the training role should be fluent with key SWPBS concepts and features, practices, and systems, and should have participated in the full training sequence for school leadership teams. In addition, trainers should have experience in working with adult learners, and possess a full range of implementation examples of SWPBS practices and systems across multiple schools.

Effective training appears to be linked to a variety of factors (Garet, Porter, Desimone, Birman, & Yoon, 2001; Guskey, 2003). For example, training content and strategies should be theoretically and empirically grounded; considerate of adult learning needs; outcome-focused, ongoing, and continuous; embedded in typical school routines; aligned with school and district improvement goals; collaboratively oriented; and linked to follow-up activities and events.

Coaching

To support school team implementation of SWPBS, an overt and durable link is needed between training experiences and actual use of SWPBS systems and practices. *Coaching or facilitation capacity* refers to the system's ability to organize personnel and resources for prompting and encouraging local school training implementation efforts. Although some individuals refer to themselves as SWPBS "coaches" or "facilitators," most implementation efforts emphasize the roles, responsibilities, and activities of coaching. Given this emphasis, efficiencies are developed by integrating the coaching functions into job descriptions of existing school personnel (e.g., special educators, behavior specialist, social worker, school counselor, cluster or complex administrator). Because of their specialized role in supporting both academic and behavioral needs of students, school psychologists are ideally situated to integrate coaching functions into their job responsibilities.

Individuals who assume coaching functions must have experience with school team implementation and problem solving, and their own coaches' preparation should be linked with actual school team training. As school teams establish major SWPBS elements (e.g., securing staff agreements, conducting self-assessments and data reviews, developing school-wide action plans), coaching support may need to be frequent (e.g., monthly) and direct (e.g., attend team meetings). However, as implementation fluency (i.e., 80% or higher on the School-Wide Evaluation Tool; Horner et al., 2004; Sugai, Lewis-Palmer, Todd & Horner, 2001) is achieved by the school team, coaching activities can be less frequent (e.g., quarterly) and more informal (e.g., e-mail). With more advanced implementation teams, coaching focuses on helping school teams self-assess the accuracy and consistency of their implementation (Team Implementation Checklist; Sugai, Horner, & Lewis-Palmer, 2002), maximize targeted outcomes, increase implementation efficiency, acknowledge progress, communicate progress to district and state leadership, and facilitate the review of data and enhancement of action plans (see www.pbssurvey.org for one model of on-going self-assessment).

Evaluation

An important aspect of any systems-level change effort, such as SWPBS, is the use of outcome data to inform decision making. Evaluations begin with specification of questions that highlight both learner outcomes and fidelity of intervention implementation. Using local data to address these questions, decisions can be made about discontinuing, continuing, or adapting current practices. This evaluation process is led by leadership team members who consider each of the systems variables

described thus far (e.g., coaching, coordination, training).

When developing an evaluation process or plan, leadership teams consider: (a) what resources and expertise are needed to conduct the evaluation; (b) what general and specific evaluation questions are needed to address measurable outcomes; (c) what type of data sources should be collected to answer evaluation questions; and (d) what activities need to be added, eliminated, or modified in the action plan.

To guide decisions, efficient schoolwide information systems are needed. One source of data that can reflect the status of the disciplinary and social climate of the school is office discipline and referral information (Irvin et al., 2006; Irvin, Tobin, Sprague, Sugai, & Vincent, 2004). Records of behavioral incidents and minor and/or major rule violations are maintained in most schools. However, to be useful, school discipline data must be based on a comprehensive list of rule-violating behaviors that are defined in measurable and mutually exclusive (i.e., nonoverlapping) terms. A system for entering, storing, summarizing, and displaying discipline data must be easy to use and time efficient (e.g., consume no more than 1% of staff time). At least quarterly, to facilitate formative problem-solving, school teams should review graphs of the following five data displays: (a) number of office discipline referrals per day per month, (b) number of office referrals by type of problem behavior, (c) number of office discipline referrals by school location, (d), number of office discipline referrals by student, and (e) number of office discipline referrals by staff member (www.swis.org).

At the district and state levels, evaluation activities focus on answering questions that address specific student outcomes, staff member implementation fidelity, and district or state level action planning. For example, at the student level, leadership teams can look at overall referral rates in relation to patterns for particular groups of students (e.g., special education, ethnicity, grade or school level), discipline consequences (e.g., suspensions, expulsions), and achievement outcomes (e.g., course failure rates, achievement scores or patterns). By examining these data, leadership teams can develop action plan activities that relate directly to the needs of specific students and schools. To illustrate, one district noted that parent participation in school was particularly low. In response, the leadership team organized activities that linked their schoolwide positive expectations to suggestions that parents could use to improve homework completion, respond to noncompliance, and promote respectful behavior during home–school–home transitions. By showing how the school could support parents, communications between home and school were enhanced.

At the district and state levels, evaluation activities should focus on aggregated student outcomes as well as fidelity of intervention implementation (e.g., Team Implementation Checklist, School-Wide Evaluation Tool). Without statements about the accuracy and fluency of intervention implementation, evaluation of intervention effectiveness is difficult to address. For example, a state leadership team learned that schools in five of six districts were implementing SWPBS at more than 80% accuracy (as measured by the School-Wide Evaluation Tool). In the one district that had less than 80% of their schools implementing with fidelity, the state team arranged a "booster" session with the school teams and met with coaches to identify strategies that could be used to address roadblocks inhibiting accurate implementation.

Local School Teams and Demonstrations

Initial implementation in a small number of schools is recommended to maximize early success and identify enhancements that may increase future implementation dispersal across multiple schools. The number of initial schools seems to vary by several factors: for example, administrative leadership strength, enrollment size of school, geographical distribution of participating schools, school experience with implementation of collaborative school-wide initiatives, level (elementary,

middle, high) of participating schools, and district capacity to lead or coordinate multiple school initiatives. In our experience, districts often begin their implementation effort with 4–10 schools, and then systematically expand based on the level of capacity and success.

To illustrate, in an urban district of 38 schools, the leadership team presented an overview of the rationale, features, and process of the SWPBS approach to all school administrators. Interested schools were directed to complete a readiness checklist in which selection of 10 teams was linked to demonstrating a set of specific prerequisites (e.g., 2- to 3-year staff development effort, high priority in school improvement plan, agreement by >80% of staff to participate, superintendent approval; cf. Latham, 1988, OSEP Center on PBIS, 2004; Taylor-Greene et al., 1997). The district determined that a 10-school pilot was manageable, and if successful outcomes were observed, expansion to another cohort of 10 schools would be considered.

From the success of initial implementation efforts, larger-scale adoption may be organized. For example, with a statewide implementation, initial teams may be selected from a variety of school districts. When a new round of team trainings is initiated, selection priority can be given to new schools that are from districts that have been trained previously. This strategy supports development of district-wide PBS leadership and coordination by taking advantage of experienced local coaches and technical assistance from successfully implementing teams. By investing in expansion within existing organizational structures, districts can make more efficient and effective use of trainers, coaches, leadership teams, funding, personnel, etc.

Initial demonstrations allow documentation that procedures can be adapted and implemented with positive effects. For example, a large urban school district created a 3-min video clip of the successful implementation of SWPBS in a middle school, and used this video to show new, but uncertain, school administrators what SWPBS "looked like."

Conclusions

Educators and school psychologists across the United States are justifiably concerned about problem behavior inside and outside their classrooms. Fortunately, effective interventions and practices exist. One approach to the systemic implementation of these practices is SWPBS, which involves an integration of measurable outcomes, data-based decision making, evidence-based practices, and overt systems to support implementers. Sustained and expanded implementation of SWPBS at the district, regional, and state levels, however, requires more than a series of professional development events that are conducted on occasional school or district in-service days.

In this article, a behaviorally based, comprehensive systems approach is suggested as a means of establishing effective and durable implementation of SWPBS. This approach is based on a team that leads a comprehensive action plan and has activities related to achieving organizational capacity for political support, funding, visibility, training, coaching, evaluation, and exemplar demonstrations. Attention to organizational supports may be the most important consideration for successful student outcomes in the SWPBS approach. However, to advance what we know and can say about SWPBS, it is important to consider issues related to future research, research to practice, and professional development.

SWPBS Research

Although conceptually sound, the SWPBS effort requires additional validation and refinement, especially with respect to confirming which aspects of the SWPBS systems approach actually account for observed improvements in intervention adoption, sustainability, and expansion. Further research is needed to address the following efficacy and effectiveness questions:

1. What factors contribute most to the effectiveness of team-based leadership and implementation? How necessary is the team?

2. How many years are required to establish sustainable and accurate implementation of SWPBS systems?
3. What supporting responsibilities and activities are most important in effective coaching capacity?
4. What percentage of schools in an administrative unit (i.e., district, region, state) are needed to establish sufficient momentum to institutionalize SWPBS implementation?
5. How do durable implementation and systematic expansion affect outcomes for students along the three-tiered continuum of behavior support?
6. How effective is the SWPBS approach in relation to other behavior-related school-wide enhancement efforts?
7. What is the nature of the relationship between SWPBS implementation and student academic achievement within the three-tiered continuum of behavior support?
8. How important is building local coaching, training, and evaluation capacity?
9. What role do school- and district-level administrators play in the adoption and sustained use of SWPBS practices and systems?

Answering these questions will expand our knowledge about what SWPBS features are necessary and what rules for data-based decision making improve our implementation and outcomes. However, the authors' acknowledge that the kind of empirical research needed to answer systems-level questions is complex and expensive. The SWPBS approach is about redesigning learning and teaching environments so that the best and most appropriate evidence-based practices can be adopted and implemented at the classroom and school-wide levels. Researchers must shift from the student to the school, district, and state as their research subjects or units of analysis, and increase their attention on a continuum of behavior support practices that is defined by the data collected from the local context.

Glasgow, Lichenstein, and Marcus (2003) suggest that we must "rethink the efficacy-to-effectiveness transition" (p. 1261), and consider the effects of context factors, such as time, resources, training, feedback, and incentives when moving experimentally validated interventions into practice. To accommodate the unique features of a local implementation, schools must consider local and context-relevant adaptations (Carnine, 1997; Elias et al., 2003; Glasgow, Lichenstein, & Marcus, 2003)—for example, implementer training and skill fluency, competing initiatives and practices, student and staff characteristics (e.g., language, culture, SES), administrative support, long-term commitment, relationship to other school or district improvement goals, documentation of need, supports for and practices of professional development, and costs (Carnine, 1995; Greenwood et al., 1993; Vaughn, Klingner, & Hughes, 2000).

Research to Practice

Until this research can be conducted, the SWPBS approach offers schools a conceptually sound and educationally valid means of increasing their capacity to adopt and implement evidence-based behavioral interventions. This approach is guided by a public health framework that emphasizes the prevention of problem behavior development, and extends more intensive behavioral interventions for students whose behaviors are unresponsive to general proactive strategies. These interventions are not innovations. Social skills instruction, function-based support, token economies, and positive reinforcement, for example, have an extensive empirical history. SWPBS provides educators, school teams, and leadership personnel with the tools and systems to increase the accuracy of initial adoption and to organize resources and supports for sustained and effective implementation.

From a practices perspective, the SWPBS approach emphasizes leadership team structures that give priority to coaching, training, and evaluation capacities. In addition, political support, visibility, and funding are con-

sidered priorities for sustained implementation. The main message is that successful adoption of effective practices will require more than simple exposure and practice presentations.

Implications for Training and Professional Development

Traditional pre- and in-service training models have focused on exposure-level presentations of behavioral interventions, classroom management, and school-wide discipline practices. The SWPBS approach assumes that this type of intervention training is insufficient. When skill fluency is not achieved, the use of positive and preventive strategies wanes and the adoption of more consequence- and punishment-oriented strategies increases. Pre- and in-service training need to focus on teaching specific skills to fluency and for application in multiple settings. Our experience, however, suggests that even this level of training is insufficient, and that school, district, and state leaders need to invest in organizational structures that adequately support the adoption of a continuum of evidence-based practices. This shift also implies that preparation programs will need to organize their training curricula so that future child-serving professionals and administrators receive training on the tenets of SWPBS.

Supplementary Material

Portions of this article were adapted from *Implementers' Blueprint and Self-Assessment on School-wide Positive Behavior Support,* published in 2004 by the OSEP Center on Positive Behavioral Interventions and Supports. The *Blueprint* and further information about the Center are available at www.pbis.org.

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