

BUILDING CAPACITY FOR UNIVERSAL PREVENTION THROUGH STATE-NONPROFIT-UNIVERSITY-SCHOOL SYSTEM PARTNERSHIPS

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Abstract

This paper will describe a State-Academic-School System partnership that has disseminated a universal youth violence prevention strategy throughout schools in the State of Maryland. Collaborators include the Maryland State Department of Education, Sheppard Pratt Health System, the Johns Hopkins University Center for the Prevention of Youth Violence, and 24 local school systems in Maryland. These partners have joined forces to support the implementation of Positive Behavioral Interventions and Supports (PBIS), a whole-school approach to school discipline and to the prevention of disruptive behavior. PBIS is an intervention supported by the U.S. Department of Education and the Center for Positive Behavior Interventions and Supports at the University of Oregon. PBIS has been implemented in over 160 schools in Maryland, with plans for training an additional 120 schools during the summer of 2004. Conference participants will learn the critical features of successful multi-level partnerships and how such partnerships can help facilitate system change. Participants will acquire skills for developing a planning, training, coaching, and school leadership infrastructure that will support the large scale dissemination of a universal intervention, school-level implementation of the intervention, fidelity enhancement, monitoring, and evaluation. The development and use of on-line tutorials to support dissemination will be described. Participants will explore the linkages of student support teams, families, community-based service providers, and other state agencies with universal interventions, and how the described infrastructure could be used to support interventions targeted at those youngsters for whom universal prevention is insufficient.

Introduction

School systems are looking for comprehensive approaches for preventing youth violence and reducing the consequences when violence does occur. Other agencies also are showing a growing interest in youth violence. Although both schools and mental health service providers rely increasingly on a public health approach to the prevention and remediation of youth violence, few examples of statewide collaborations in this area exist.

This paper describes a State-Nonprofit-Academic-School System partnership that has disseminated a universal youth violence prevention strategy throughout schools in the State of Maryland. Collaborators include the Maryland State Department of Education, Sheppard Pratt Health Systems, the Johns Hopkins University Center for the Prevention of Youth Violence, and 24 local school systems in Maryland. These partners have joined forces to support the implementation and evaluation of Positive Behavioral Interventions and Supports (PBIS), a whole-school approach to school discipline and to the prevention of disruptive behavior (Sugai, Horner, and Gresham, 2002). PBIS is an intervention supported by the U.S. Department of Education and the Center for Positive Behavioral Interventions and Supports at the University of Oregon. PBIS has been implemented in over 160 schools in Maryland, and over 1,300 school nationally. In addition to the success achieved by this collaboration, the lessons learned have important implications for other states and school systems attempting to undertake large-scale implementation of evidence-based practices or other

programs. This paper describes the infrastructure that has evolved in Maryland to support school-wide interventions going to scale as a result of important lessons learned.

The Need for School-wide Interventions to Reduce Disruptive and Aggressive Behavior

Disruptive and aggressive behavior is a serious concern for schools, local communities, and providers of health services. The No Child Left Behind (NCLB) legislation passed by Congress in 2002 has increased public attention on the level of violent, aggressive and disruptive behavior occurring in too many of our Nation's schools. Although the recent Surgeon General's report on youth violence documented that major crime by youth was in decline, the rate of disruptive and defiant behavior in schools has risen (U.S. Department of Health and Human Services, 2001). Such behaviors present a significant challenge for schools and for teachers who must balance the demands of managing student behavior with the delivery of academic content. Disruptive and aggressive behaviors are the most common reasons for office referrals, suspensions and expulsions (Walker, Horner, Sugai, and Bullis, 1996).

The prevention or reduction of early disruptive and aggressive behavior also has important public health implications: children who display a high degree of disruptive and aggressive behavior in elementary school are at greater risk for later, more serious behavioral problems, school failure, and mental health problems (Kupersmidt and Coie, 1990; Loeber and Dishion, 1983; Loeber and Stouthamer-Loeber, 1987; Parker and Asher, 1987; Hawkins, Catalano, and Miller, 1992; Coie, Dodge, and Kupersmidt, 1990; Jalongo, Werthamer, Kellam, Brown, Wang, and Lin, 1999).

Disorganized and unruly school environments can contribute to disruptive and aggressive behavior. Schools with poorly articulated and inconsistent discipline practices may create an environment that fails to diminish early problem behavior and may unwittingly reinforce such behavior through inappropriate school and teacher responses (Walker and Buckley, 1973; Reid and Eddy, 1997). Some have gone so far as to describe schools as "risk-prone" contexts (Steinberg and Avenoli, 1998), where children with behavioral problems generate punitive reactions from teachers and peers (Mayer, 1995; Mayer and Sulzer-Azaroff, 1990). Frequently, youth who exhibit disruptive and aggressive behaviors are suspended or expelled from school and then segregated with equally delinquent youth upon their return (Gottfredson, 2001; Wu, Pink, Crain, and Moles, 1982). These punitive interventions have been shown to be one of the least effective responses schools can make to disruptive and aggressive problem behavior (Gottfredson, 1997; Lipsey, 1991; 1992; Lipsey and Wilson, 1993; Tolan and Guerra, 1994). Punitive responses frequently produce only short-term relief (McCord, 1995; Patterson, Reid, and Dishion, 1992). When used without a corresponding system to support positive behavior, punitive responses can lead to increases in mental health problems, aggression, vandalism, truancy, and dropping out of school (Guess, Helmstetter, Turnbull, and Knowlton, 1987; Mayer, 1995; Mayer and Sulzer-Azaroff, 1990; McCord, 1995).

Positive Behavioral Interventions and Supports

PBIS represents a good example of how educators are applying research-based principles of behavior management to whole-school interventions in order to create positive and safe school environments with reduced discipline problems. PBIS was originally developed as an alternative to aversive interventions that were being used with students with severe disabilities who engaged in extreme forms of self-injury and aggression (Durand and Carr, 1985; Meyer and Evans, 1989). More recently, PBIS has been applied successfully with a wide range of students, in a wide range of contexts (Carr et al., 1999; Horner, Albin, Sprague, and Todd, 1999), and extended from an intervention approach for individual students to an intervention approach for entire schools (Colvin, Sugai, Good, and Lee, 1997; Colvin, Kame'enui, and Sugai, 1993; Lewis, Colvin, and Sugai, in press; Lewis, Sugai, and Colvin, 1998; Taylor-Greene et al., 1997; Todd, Horner, Sugai, Sprague, 1998; Sugai, Sprague, Horner, Walker, 2000).

PBIS aims to create school environments that support positive student behavior and diminish disruptive and aggressive behavior. PBIS helps schools create systems (e.g., discipline systems, reinforcement systems, and data management systems) and procedures (e.g. office referral, reinforcement, training, and organizational leadership) to create change in the school environment as a means of achieving change in student and teacher behaviors. See Table 1 for a summary of the critical features of PBIS.

Data concerning the impact of PBIS on administrative practices is available from implementation studies underway in Oregon (Colvin and Fernandez, 2000; Nersesian, Todd, Lehmann, and Watson, 2000; Sadler, 2000; Taylor-Greene, and Kartub, 2000), Illinois (Liebek and Eber, in press), Pennsylvania (Lohrmann-O'Rourke et al., 2000) and Hawaii (Nakasato, 2000). The approach has been applied successfully with a wide range of students and in a wide range of contexts (Carr et al., 1999; Horner et al., 1999). Initial results suggest PBIS produces important outcomes, such as a reduction in office discipline referrals, reductions in suspensions and expulsions, and increases in academic performance. Training school-teams in PBIS is associated with changes in the internal discipline practices and systems used in schools (Nersesian et al., 2000) and these effects have been found to persist over a period of years (Taylor-Greene and Kartub, 2000).

Table 1. PBIS Critical Features

Feature	Description
A PBIS leadership team exists to direct the implementation of PBIS.	This team includes from 4-6 staff members and the principal or vice-principal.
School-wide expectations are defined and agreed upon by staff.	Five or fewer rules are defined (e.g. Be Safe, Be Responsible, Be Respectful). Rules are operationally defined for classroom and non-classroom settings and posted publicly in all locations.
Defined school-wide expectations are taught explicitly to all students.	Each teacher creates and executes a specific plan for teaching expectations in the classroom and non-classroom settings.
A school-wide system exists for rewarding students who exhibit expected behaviors.	The system includes some type of tangible reinforcer (e.g. "gotcha" coupon). All teachers and staff in classroom and non-classroom settings use this consistently.
An agreed upon system exists for responding to behavioral violations.	Administrators, teachers and staff agree upon what constitutes an office referral vs. a classroom-managed referral.
A formal system exists for collecting, analyzing, and utilizing disciplinary data.	School PBIS teams review data on a weekly basis and use data to make adjustment in school systems and procedures.

The U.S. Department of Education disseminates PBIS through the Center for Positive Behavior Interventions and Supports at the University of Oregon (www.pbis.org). PBIS has been well received in Maryland with all 24 local school districts having sent personnel for training.

Development of the Maryland Consortium to Support Safe and Orderly Schools

We wish to first point out that the current collaborations and structures have evolved over time, in part to our own failures. The Maryland PBIS Initiative began in 1998 with a meeting between Dr. Nancy Grasmick, State Superintendent of Schools, and Dr. Steve Sharfstein, Chief Executive Officer of Sheppard Pratt Health System (SPHS), about the need for the State to have a proactive plan to promote positive mental health, and to reduce school violence and the number of youth being suspended or referred for additional services

because of their disruptive behaviors. From this discussion came a partnership between the Maryland State Department of Education (MSDE) and SPHS for the review and identification of a suitable program for the state.

In July 1999, MSDE/SPHS contracted with Dr. George Sugai, from the University of Oregon's Center for Positive Behavior Interventions and Supports to train 15 school-based teams representing nine local school systems in the PBIS school-wide approach to discipline. The following year, MSDE and SPHS formed a State Leadership team comprised of representatives from MSDE and SPHS, (later expanded to include school system and Johns Hopkins representatives) and appointed Milt McKenna, an Education Program Specialist at MSDE who oversees the MSDE Safe and Drug Free Schools program, and Susan Barrett, Director of Program Development and Training at SPHS, as Co-Directors of PBIS in Maryland. Committed to developing a program that is for all students, a decision was made to place the oversight of the PBIS project within the MSDE Division of Student and School Services, rather than Special Education.

To provide support for the Leadership Team's efforts to create an infrastructure for statewide implementation and evaluation of school-wide interventions, MSDE provided SPHS with a contract to assist in training and oversight of the overall implementation of PBIS in Maryland. A two-day workshop in April 2000 for local school system Assistant Superintendents, Directors of Student Services, Directors of Special Education, and other stakeholders followed the initial training. The training emphasized information on best practices and current research concerning the issues of prevention and behavioral interventions in schools with an emphasis on capacity building at the school level. Training for PBIS school-based teams has occurred in each subsequent summer.

In the fall of 2001, Leaf and Keys, the Director and Associate Director for Education of the Johns Hopkins Center for the Prevention of Youth Violence (Johns Hopkins), a CDC-funded Academic Center of Excellence, approached the Leadership Team to determine their interest in conducting a systematic evaluation of the PBIS program in Maryland and their willingness to expand the State Leadership Team to include academic collaborators. Leaf and Keys' interest in developing a randomized trial within the broader PBIS initiative and in working with the state to refine and expand the infrastructure required to move the initiative to scale, was a good match with needs already identified by the State Leadership Team.

Infrastructure to Support Implementation and Dissemination of PBIS in Maryland

State level

A State Leadership Team oversees the PBIS initiative. The team consists of representatives from the Student Services and Special Education Branches at MSDE, representatives from SPHS, and representatives from the Johns Hopkins. Both MSDE and SPHS have each designated a person who shares overall leadership responsibility for the initiative, and have the title of Co-Coordination of PBIS for the State of Maryland.

The State Leadership Team meets monthly to review the status of trained schools and to review all training and support material and procedures used in the statewide implementation. Initially, members of the State Leadership Team conducted twice-yearly visits to all PBIS schools, but as the numbers of schools expanded, the capacity to reach all schools diminished.

A subset of the larger State Leadership Team meets weekly. This PBIS Management Team reviews progress of schools, troubleshoots problems, communicates regularly with school systems' coaches, develops training, and monitors the project's evaluation. The Management Team also prepares the agenda for the larger State Leadership Team meetings and maintains communication with the developers of the PBIS model, George Sugai and Robert Horner.

School system level

The Directors of Student Services function as the school system points of contact for the State Leadership Team and oversee the implementation of PBIS within each of their school systems. In larger school systems, the Directors of Student Services have designees who are the direct interfaces with the State Leadership Team and oversee the day-to-day operations of the program. We refer to these points of contact as Regional Coordinators. Participation in this state initiative requires that school systems provide resources for coaching (personnel) and funding to support the attendance (e.g., stipends as necessary, mileage, and overnight accommodations) of school teams at the summer PBIS Institute.

The State Leadership Team recognized that attendance at summer training alone is insufficient to lead to a high fidelity of implementation. Schools that are developing new systems and procedures need ongoing, consistent support. As a result, the State Leadership Team requires each school system to provide a coach for each trained school. The State Leadership Team recommends one coach per school. Coaches are school systems' personnel who have received specialized training in PBIS and the role of a coach. Coaches receive release time from other responsibilities to assume this new role. In most cases, school psychologists and school behavioral specialists have been designated by school systems for the role of coach.

Coaches have been a component of the PBIS system since its inception, but the importance of the coaches for the success of PBIS (or any school-based intervention) is becoming more clear: program evaluations are documenting a strong relationship between the quality of technical assistance and program fidelity and outcomes (Elliot, 2002). Coaches have frequent, weekly contact with schools either through site visits, attendance at PBIS team meetings, or email or phone communications. In addition to attending team meetings, coaches provide consultation regarding behavior management strategies and the design of new systems and procedures for creating environments supportive of positive behavior, and assist schools with using discipline data for decision making about whole-school behavior management practices.

School level

School-based teams provide leadership for PBIS at the school level. Training for these teams occurs annually at a two-day statewide training institute. Individuals who are representative of the school (e.g., by grade level and department) and respected by their colleagues comprise the school-level team. Collectively, the team members need to (1) be competent with behavioral principles, (2) have a regular and efficient means of communicating with the school staff as a whole, and (3) be endorsed actively and vigorously by their principal. Principals or vice-principals must be members of the team. During the school year, this team meets weekly initially and then, after the program is well established, at least monthly. Meetings are guided by data and a proactive problem-solving approach. This team has the responsibility for reviewing school needs and establishing staff and school improvement action plans.

Training

All PBIS school teams receive training on skills needed to implement the critical elements of PBIS. Both new teams and returning teams attend sessions at an annual statewide summer institute. See Table 2 for a summary of the Summer Institute. Coaches and the state leadership team provide training and ongoing technical support. Training includes (a) components and processes of school-wide discipline, (b) strategies for beginning the school year using PBIS, (c) procedures for teaching behavioral expectations to students, (d) behavior management in non-classroom settings, (d) data-based decision making, (e) developing action plans, and (f) understanding and managing escalating behaviors. Initial training occurs during the two-day Summer Institute. After initial training, the institute format changes to include a greater variety of workshops and breakout sessions that are focused on specific elements of the PBIS model and provide opportunities for sharing strategies across schools.

Table 2. Maryland PBIS Summer Institute

Day One	Coaches training
Day Two	New Teams training with coaches
Day Three	2 nd day for New Teams, with coaches
Day Four	Returning Team training, with coaches Exemplar School Awards Exemplar School Poster Sessions
Day Five	2 nd day for Returning Teams, emphasis on action planning, with coaches

Additionally, team leaders, coaches, and principals attend regional training sessions twice a year during the fall and spring. These sessions include presentations by exemplary schools, problem-solving around barriers to implementation, and identification of additional types of support that team members and coaches might find helpful.

Due to the increased interest in PBIS across the state, the number of schools seeking to be trained has increased beyond the capacity of MSDE and SPHS to train all schools at one statewide institute. This, coupled with the fact that the State Leadership Team does not have the capacity to provide ongoing support to individual schools, has prompted the state to explore holding regional training institutes in 2005 and having local systems assume more responsibility for monitoring and supporting school implementation efforts.

Monitoring fidelity

In addition to site visits, all school staff complete the PBIS Staff Survey (Sugai, Todd, and Horner, 2000) as a baseline measure prior to the initial training and then annually thereafter. The survey examines the current status and need for improvement of four behavior support systems: school-wide discipline systems, non-classroom management systems (e.g., cafeteria, hallway, and playground), classroom management systems, and systems for individual students engaging in chronic problem behaviors. Schools use survey results for decision-making and designing their annual action plan for positive behavior interventions and support.

The school PBIS team completes the PBIS Team Implementation Checklist (Sugai and Horner, 2001) on a monthly basis. The survey includes information about activities related to elements of the PBIS model and status of implementation; and, ratings of their activities as a team and the implementation status of the PBIS action plan. The PBIS team leader submits these reports monthly to the assigned coach who uses the data to provide feedback and assistance to the team. Coaches submit reports to Regional Coordinators (in larger systems, or directly to the State Leadership Team in smaller systems). Regional Coordinators forward reports to the State Leadership Team for review and discussion.

The System-wide Evaluation Tool (SET; Sugai, Lewis-Palmer, Todd, and Horner, 2001) is a third measure of fidelity, based on direct observation of PBIS systems and practices within a school by an independent observer. In conducting the SET, the observer reviews school material (e.g. discipline handbook, school improvement plans/goals, social skills instructional materials, behavioral incident summaries, and office discipline referral forms), observes classrooms, and interviews the school principal, randomly selected students, teachers, and staff. Internal consistency correlations for the SET resulted in an overall Cronbach's Alpha of 0.96 with subscale correlations ranging from 0.56 to 0.92 (Horner, Todd, Lewis-Palmer, Irvin, Sugai, and Boland, in press) The total scores for the SET has also been shown to correlate positively and significantly with the total scores on the PBIS Staff Survey $r = 0.75$, $p < 0.05$ (Horner et al., in press).

Intercorrelations have also been calculated across SET subscales. These ranged from 0.44 to 0.81, with a median of 0.65 (Horner et al. in press). The SET is conducted annually.

Evaluating PBIS Outcomes

Leaf and Keys oversee the evaluation of PBIS in Maryland. This randomized trial, funded by NIMH (R01 MH067948-01A1) and Johns Hopkins (R49/CCR318627), includes 37 elementary schools, 21 of which are intervention schools and 16 are control. These schools represent five different school system partners. The evaluation includes measures of school characteristics, demographic information about teacher and staff, and student behavior. See Table 3 for a list of outcome assessments.

Table 3. Outcome Measures

Assessment Tool	Purpose
Teacher Observation of Classroom Adaptation (TOCA) Werthamer-Larsson, Kellam, and Wheeler, 1991)	Behavior checklist that assesses academic behavior, pro-social behavior, and disruptive behavior
Organizational Health Inventory (OHI) (Hoy and Tarter, 1997; Hoy, Tarter, and Kottkamp, 1991)	Consists of 37 items that measure five aspects of healthy school functioning: institutional integrity, teacher affiliation, academic emphasis, collegial leadership, and resource influence
School Climate Survey (Hanes, Emmond, and Ben-Avie, 2001)	Measures student perceptions of disruptive and aggressive behavior in school
Student Interaction in Specific Settings (SISS) (Cushing and Horner, 2002).	Assesses incidents of disruptive behavior on a varying scale of intensity through observation of behavior in non-classroom setting

PBIS schools in Maryland use the reduction in discipline referrals as an outcome evaluation measure. Schools use the School-Wide Information System (www.SWIS.org), developed by the University of Oregon to summarize office discipline referrals by location, time of day, type of referral, and perpetrator. School teams review this data on a weekly basis and use it to make decisions about changes in school-wide systems and procedures.

Next Steps in Maryland

The Maryland Consortium at present is expanding its focus from school-wide universal prevention to interventions targeted at those students for whom the universal intervention is insufficient. Plans to expand the State infrastructure to include a State interagency Committee on Safe School Climate as an advisory to the PBIS State Leadership Team are underway. Additionally, the summer training for 2004 for returning school teams will include representatives from mental health, juvenile services, and parent groups.

The PBIS Management Team has also partnered with the Johns Hopkins Center for Technology in Education to develop an on-line PBIS tutorial as a way to educate new team members about PBIS. The tutorial will also help reinforce lessons learned from the Summer Institute and will demonstrate by means of video clips how schools have actually implemented the PBIS critical features.

Conclusion

State-nonprofit-university-school system partnerships provide an important opportunity to bring together diverse expertise to support school and school system efforts to create safe school environments. Bringing a successful intervention to scale across a state with multiple jurisdictions requires an infrastructure that supports training, monitoring, coaching, data collection, and evaluation.

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Biography

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