IMPLEMENTING SCHOOL-WIDE BEHAVIOR CHANGE: LESSONS FROM THE FIELD

MICHAEL P. GEORGE

Centennial School of Lehigh University

GEORGE P. WHITE

Lehigh University

JOSEPH J. SCHLAFFER

Exeter School District

In this article, we examine two schools that successfully adopted school-wide positive behavior interventions and highlight some of the common features that contributed to their success. As part of our analysis, we draw upon the theoretical literature on organizational change to discuss factors that supported these successful school-wide reform efforts, including the contributions of administrators, teachers, and school psychologists. © 2007 Wiley Periodicals, Inc.

"The best laid plans of mice and men often fail." This wide-ranging assessment has been well supported by numerous studies of planned educational change. Most change efforts in education over the past 25 years have met with limited success. Even when supported by federal or state government mandates, the level of successful implementation of innovative programs has been very low (Barber, 2001; Berends, Bodilly, & Kirby, 2002; Berman, 1981). Mann (1978) studied nationwide school reform initiatives and cited the success rate at about 20% for actual change in educational programs as a result of planned innovations. Current data seem to indicate that little has changed in the past few decades (McDermott, 2000; Mirel, 1994; Rice & Malen, 2003).

Today, school reform efforts are required to meet the political pressures of the No Child Left Behind Act of 2001 and other pieces of federal legislation such as the Individuals With Disabilities Education Act (2004), with their mandates for increasing student achievement and improving student behavior. Evidence, principally from case studies and anecdotal reports at elementary and middle schools, is rapidly accumulating to demonstrate the effectiveness of school-wide positive behavior support (SWPBS) as a promising approach for promoting positive student and school outcomes (Kern & Manz, 2004). Indeed, according to Liaupsin, Jolivette, and Scott (2004), "school-wide systems of behavior support are well suited to meet the current and future challenges faced by schools in providing a successful educational experience for all students" (p. 498).

Despite such acclamations of enthusiastic support, some schools fail to adopt organizational innovations such as SWPBS even after initial trainings and testimonials to their effectiveness from experts in the field. Given the apparently high levels of satisfaction reported by schools that have adopted positive school-based interventions (Kern & Manz, 2004), one wonders why some efforts are adopted and implemented while others are resisted and soon abandoned.

In this article, we examine two schools that successfully adopted school-wide positive behavior interventions and highlight some of the common features we believe contributed to their success. As part of our analysis, we draw upon the theoretical literature on organizational change and discuss factors that support successful school-wide reform efforts.

SWPBS

SWPBS is a multilevel approach for creating safe school environments (Horner & Sugai, 2000; Sugai & Horner, 2002). Grounded in a team problem-solving approach, school-wide positive

Correspondence to: Michael P. George, Centennial School of Lehigh University, 2196 Avenue C, LVIP 1, Bethlehem, PA 18017. E-mail: mpg6@lehigh.edu



behavior interventions target three conceptual levels of interventions: primary (i.e., universal), secondary (i.e., selected/targeted), and tertiary. Primary interventions are designed to meet the needs of most students within the school and are applied across all settings. Examples of primary interventions are the development, direct teaching, and vigorous reinforcement of three to five positively stated school rules. Primary interventions are aimed at students who come to school generally well equipped with educational skills, and it is estimated that primary interventions meet the behavioral and social needs of approximately 80 to 90% of the students within the school setting (Sugai, Horner, & Gresham, 2002). Primary interventions are often called "universal" interventions because application is across all students within the school environment (Walker et al., 1996).

Secondary, or selected/targeted interventions, target students within the school who exhibit significant risk factors and require more specialized forms of assistance beyond the support provided through primary interventions. Tutoring, social skills instruction, and mentoring programs are examples of interventions at this level. It is estimated that secondary interventions meet the needs of approximately 5 to 10% of the student body (Sugai & Horner, 1994).

Tertiary interventions aim at the approximately 1 to 5% of the school population who have long-standing, persistent behavior problems and for whom primary- and secondary-level interventions prove insufficient. Interventions for this group are individualized, usually predicated on functional behavioral assessments, and generally take more time and energy for staff to implement.

Horner et al. (2004) listed seven key features of SWPBS: (a) school-wide expectations or rules for appropriate behavior; (b) direct, active teaching of the expectations and rules; (c) acknowledgment of students who obey the rules and otherwise engage in appropriate school conduct; (d) consequences for rule-violating behavior; (e) use of data to guide decision making; and (f) administrative support at the school and (g) district levels. Applications of positive school-wide interventions are likely to differ across school settings as school teams respond to unique environmental conditions associated with various schools.

Case 1: Centennial School of Lehigh University

Centennial School of Lehigh University is a day-school program located in Bethlehem, Pennsylvania, that provides special education and other services for children and youth ages 6 to 21 years of age who are classified under the Individuals with Disabilities Education Improvement Act of 2004 (IDEA; 2004) as emotionally disturbed or autistic. Students are referred to Centennial School from nearly 40 area school districts only after multidisciplinary teams make the determination that the resources for addressing students' challenging and disruptive behaviors within the districts are inadequate. Approximately 100 students, most (i.e., 93%) of whom are classified as exhibiting an emotional disturbance, receive services from the school annually. Seventy-six percent of the student body is Caucasian, 13% is African American, and 11% is Hispanic American. Eighty-two percent (based on attendance data from 2003–2006) receive free or reduced-price lunch.

The details of Centennial's implementation of a SWPBS model is chronicled in detail elsewhere (see Fogt & Piripavel, 2002; George, 2000; Miller, George, & Fogt, 2005). Briefly, in 1998, Centennial School adopted a school-wide model similar to the model successfully implemented at the Fern Ridge Middle School in Veneta, Oregon (Taylor-Greene & Kartub, 2000), marking an early attempt to ascertain the benefits such a system might have for an alternative school serving some of the most behaviorally challenging children and youth in the public school system. Like other models of SWPBS, Centennial's model was comprised of a three-tier system that included universal, selected, and tertiary interventions. The school-wide model, combined with other research-based practices of positive behavior support (PBS), produced substantial reductions in antisocial

behavior as indicated in part by the virtual elimination of physical restraint (e.g., 122 episodes during the first 20 days of school as compared to no occurrences during the last 20 days of the school year) and the closing of the only two seclusionary time-out rooms at the school. Follow-up interviews with teachers at the end of the school year indicated a high degree of teacher satisfaction with the interventions and with the magnitude of positive student outcomes, resulting in a commitment from teachers and other school staff to continue the innovation the subsequent year.

Now in Year 9 of implementation, the practices associated with the school-wide innovation are fully integrated into the school culture and have led to substantial decreases in student antisocial behavior and significant increases in prosocial behavior. Centennial School is currently one of the few alternative schools in the country where sustainable systems are in place to support students at all three PBS levels (i.e., universal, selected/targeted, tertiary) (for a more comprehensive discussion of the effects of SWPBS and other research-based practices on the students and staff of Centennial School, see Miller et al., 2005).

Case 2: Northwest Elementary School

Northwest Elementary School is located in a small urban center with a population of approximately 25,000 in Eastern Pennsylvania. Due to the collapse of its steel industry, the city suffers from a disintegrating tax base. The elementary school, one of five in the district, is located in a high-crime downtown area, making walking to school a potentially dangerous activity. The school serves approximately 550 students in Grades 1 through 5, and the student body is 48% Caucasian, 47% Hispanic, 3% African American, and 1% Asian. Sixty-seven percent of the students receive free or reduced-price lunch.

Discipline problems at the school were high, as evidenced in part by the number of office referrals (1,717) and after-school detentions (845) recorded during the baseline year.

Community support for the school was low, as judged by poor attendance at the school's annual open house. For example, advertisements by school officials that included flyers and repeated mailings yielded not a single parent at the school's first open house in autumn of the baseline year.

That same year, the new principal at the school began exploring the feasibility of implementing a system of SWPBS. By semester's end, a small-scale effort was implemented in the school cafeteria—the setting identified by school staff as the most chaotic in the building. The intervention consisted of the development of explicit expectations that were directly taught and modeled by staff and rehearsed by students. Tokens in the form of facsimile dollars were awarded to students for rule-following behavior. Success, defined as the restoration of polite behavior in the cafeteria, was immediate and provided the foundation for a larger intervention the following year that would include the entire school.

At the beginning of the subsequent school year, SWPBS was implemented throughout the entire school program. The school-wide intervention incorporated (a) clearly defined rules and expectations across the various school settings, (b) direct teaching of the rules and expectations, (c) a gradation of consequences for rule-violating behavior, (d) heightened recognition of students' appropriate behaviors by school faculty, (e) special incentives, (f) the use of data for decision making, and (g) consistent follow-through on the part of school staff. Training of teachers in critical program components occurred over 2 days during the summer prior to the commencement of the school-wide intervention. At the same time, resources needed for assisting children who required individualized interventions were identified.

By the end of Year 1 of implementation, the system of PBS produced decreases in the frequencies of both disciplinary referrals and after-school detentions. Office referrals for the year decreased from 1,717 to 702 (i.e., 1,015 fewer than in the baseline year), and after-school detentions decreased from 845 to 85 (i.e., 760 fewer than in the baseline year). By the end of Year 2

of the school-wide innovation, office referrals were further reduced to 619, and the number of after-school detentions were reduced to 21. Of additional interest was the impact of the school-wide intervention on students with disabilities. In Year 1, 57 students with Individual Education Programs (IEPs) within the school population accounted for 298 office referrals, 338 after-school detentions, 19 days of in-school suspension, and 5 days of out-of-school suspension. In Year 2 of the school-wide intervention, 26 students with IEPs accounted for 34 office referrals, 2 after-school detentions, 3 days of in-school suspension, and 5 days of out-of-school detention. Nearly 450 families were in attendance at the first open house of that year; a remarkable contrast from the previous year. According to the school's principal, the rise in family attendance was partially attributable to a renewed emphasis by staff on positive contacts with families (e.g., speaking with family members about the school's efforts to help students succeed) rather than disciplinary contacts (e.g., speaking with family members about students' misbehavior at school) (Schlaffer, 2003).

CHARACTERISTICS OF SUCCESSFUL CHANGE

The examples presented herein involved two distinct education settings: an alternative school for students with challenging behaviors and an urban general education elementary school. There were differences between the two schools in terms of student demographics, physical structures, goals, purposes, curriculum, and as implementation of the school-wide interventions unfolded, in the topography of the interventions themselves. For example, although point sheets were a key element of the school-wide intervention at the alternative school, these were not part of the interventions used in the elementary school. Nonetheless, there were a number of similarities between the interventions at the two schools that are worth mentioning. For part of this analysis, we draw upon the theoretical literature in organizational change to anchor our remarks and offer recommendations. We have included a resource list for the reader (see Table 1) that identifies additional reference material for the organizational factors and strategies that led to sustainable change.

School-Wide Agreements

In both schools, the models of school-wide change were grounded on a series of agreements among stakeholders (i.e., teachers, paraprofessionals, ancillary staff including school psychologists and others) to adhere to certain procedures within the school and classroom environments. Both schools, for example, developed brief slogans representing major school rules, including (a) be there be ready, (b) be respectful, (c) be responsible, (d) keep hands and feet to self (personal space), and (e) follow directions (Taylor-Green & Kartub, 2000). Rules were defined differently by setting and taught to students across the various settings in the school. Teachers and staff modeled the desired behaviors and provided children with many opportunities to rehearse and practice the expectations and rules throughout the school, and teachers recognized the children for doing so through verbal praise and other forms of reinforcement. For example, both schools created "school stores" for children to exchange tokens for tangible rewards.

Class-Wide Interventions

Both schools reached agreements on common interventions for teachers to employ in their classrooms prior to sending children to the principal's office. The class-wide interventions differed in specifics between the two schools, but were similar in that each consisted of a set of sequential steps that provided teachers with a structure to use for managing low-level misbehavior. For example, teachers in the alternative school used a sequence that included (a) an oral review of classroom expectations at the beginning of every class, (b) public recognition of students who followed classroom expectations, (c) private reminders for students who were not following classroom expectations, (d) opportunities to "take time" (i.e., take a brief break from a frustrating

Table 1
Organizational Factors and Strategies for Sustainable Change

Organizational factors	Strategies	References
Leadership	Rationale and shared vision for change Clear and consistent support from administrators, including planning, organizing, problem solving, clarifying, informing, monitoring, motivating, consulting, recognizing, supporting, managing conflict, team building, networking, delegating, developing, mentoring, and rewarding	(Fullan, 2001) (Marzano, Waters, & McNulty, 2005) (McCloud, 2005) (Mohr & Dichter, 2001) (Patterson & Rolheiser, 2004) (Yukl, Wall, & Lepsinger, 1990)
School-wide teams	• Teachers, instructional assistants, school psychologists, specialists, administrative staff	(Freeman, Smith, & Tieghi-Benet, 2003)
School-wide agreements	School-wide expectations and rules Be there be ready Be respectful Be responsible Personal space/hands and feet Follow directions Rules defined operationally by setting Data-based decision making Recognition of positive behavior Token economy Facsimile dollars Awards ceremonies School stores Consistent consequences for rule-violating behavior	(Garmston, 2002) (Mohr, 1998) (Taylor-Green & Kartub, 2000) (Gilbert & Gilbert, 1992) (Carr et al., 2002) (Alberto & Troutman, 2003) (Dwyer, Osher, & Warger, 1998)
Class-wide interventions	Total commitment from all teachers Review of expectations Focus on positive behavior Emphasis on academic acquisition Public recognition of rule-following behavior Private warnings Opportunities to "take time" Problem-solving process	(Sugai & Horner, 2002) (Carr et al., 2002) (Dunlap & Kern, 1996) (Gottfredson, Gottfredson, & Hybl, 1993) (Glasser, 1990)
Resources	Training of faculty and staff Time	(Boyle, While, & Boyle, 2004) (Sparks, 2001)
Organizational restructuring	Codification of new practices Annual revisions of school handbooks to reflect school-wide agreements Redefinition of roles for school psychologists and school counselors Decision rules triggering tertiary interventions	(Fullan, 1995) (Giles & Hargreaves, 2006) (DuPaul, 2003)

activity), (e) private warnings subsequent to the quiet reminder for persistent rule-violating behavior, and finally (f) a directive to report to "problem solving." Problem solving is a four-step process (i.e., problem identification, identification of a replacement behavior, development of a plan, and commitment to the plan) that allows students the opportunity to resolve issues and return

quickly to class (Glasser, 1990). Consequently, when students at the alternative school left the classroom because of behavior problems, they left to problem solve (with the goal of quickly returning to the classroom) rather than simply reporting to the principal's office as part of a "discipline referral."

Teachers in the elementary school followed a similar sequence for intervening with low-level misbehavior (i.e., review of expectations prior to the class period, public recognition of appropriate behavior, private reminders and warnings for misbehavior), but one that incorporated two additional steps. First, disruptive students were directed to retrieve colored cards from a wall chart in the room that designated different levels of behavioral infractions; a green card signified a first-time warning, and a yellow card signified a second warning. The third card, a red one, was a signal for the child to leave the classroom. The three-card system was developed and agreed upon by the elementary teachers as a replacement for a previous procedure that entailed writing names on the chalkboard, which was found to be an ineffective strategy.

Second, before reporting to the principal's office, students were required to first report to a "buddy teacher." A buddy teacher was another classroom teacher who served as the child's advocate, confidante, and mentor within the building. Students who could problem solve successfully with the buddy teachers returned to class. Students who failed to problem solve successfully with the buddy teacher or students who returned to class and continued to be disruptive were sent to the office immediately, as were students who engaged in any serious or dangerous misbehavior within the classrooms.

Class-wide interventions provided structures for teachers to operate within when students engaged in low-level misbehavior in the classrooms. The goal was to maintain students in the classroom and keep them focused on the tasks at hand. Secondarily, although perhaps equally important, the goal was to prevent low-level misbehavior from escalating to more serious forms of misbehavior. The multilayered approaches for classroom discipline in the schools not only provided students with direct instruction in appropriate classroom behavior through oral reviews, modeling, and reinforcement of the classroom expectations but also allowed students to receive multiple opportunities through reminders, prompts, and private warnings to regain their focus and remain in class. When used consistently across all classrooms, the multilayered intervention systems provided a visible sign to both students and their parents/caregivers that teachers at the schools placed a premium on maintaining students in the classrooms. Moreover, the class-wide systems of discipline added an element of fairness in that everyone in the environment was knowledgeable about the rules and attempted to enforce them in the same way for all students.

In addition to class-wide procedures governing behavior, teams in both schools committed to incorporating intensive academic interventions as part of the school-wide interventions. For example, alternative school teachers focused on filling every moment of allocated time with relevant activities for boosting students' active engagement in instructional lessons. To support such efforts, new curriculum materials and equipment were purchased, teacher-preparation periods were added to teachers' schedules, and "teaching teams" were formed to deliver instruction. Teachers also were provided with intensive training in various evidence-based instructional techniques for enhancing the delivery of interesting and engaging lessons.

In the elementary school, students from various grades were grouped homogeneously for reading and math instruction based on their functioning levels, permitting students of different chronological ages to enjoy classes together. Teachers at the elementary school also received training in direct instruction techniques to assist struggling readers. Acquisition of academic skills became the central mission at both schools—an emphasis that had inherent appeal for teachers who traditionally define themselves in that role.

Clear Rationale and Shared Vision

The need for change within the schools was embedded in questions such as "What is it we hope to achieve?" and "What is achievable?" And it was the administrators responding to environmental conditions in the schools that initially helped articulate answers to those questions. The administrators observed, researched, and questioned assumptions that supported the present conditions at the schools, and each administrator engaged school personnel in ongoing dialogues about what the staff would like to accomplish in the future. In each instance, administrators encouraged their staffs to envision a more desirable set of conditions for the future and to begin thinking about a process for getting there. Eventually, the administrators and their school teams developed clear rationales for making large-scale changes to the schools—rationales that stipulated reasons for making the changes and creating school environments where quality teaching could occur. A strong rationale and vision allow for clearly articulated terminal goals, coordination among school staff to achieve the goals, standards against which to judge future success, and a plan for the dispersal of resources (George, 2000).

In the alternative school, for example, the administrator appealed to staff to envision a future where students would make positive changes in their lives and exercise control over their own behavior—if teachers would take the time to teach them how do to so. The goal of student self-management was juxtaposed with present practices that placed staff in the position to control students, usually through physical management and seclusionary time-outs. In addition, displaying data that were collected the previous year, the administrator cited the potential dangers for injury to staff, noting that data showed 82% of the injuries to staff occurred as a result of situations that involved physical restraint. The administrator of the elementary school, on the other hand, framed the need for impending change as a choice between present practices that relied on reacting to and punishing student misbehavior and a future vision of a school that emphasized *teaching* students how to behave and recognizing them when they did so appropriately.

In both schools, the rationales for change were simple, clear, and easily understood by school personnel, although not initially supported by all individuals. In both instances, the rationales provided guidance for future action by giving those involved in the school-wide initiatives a common goal to achieve. Creating a common shared mindset of what "should be" is the first step in successful change (Senge, 1990).

Leadership

The administrators in these two schools were fully committed to the success of the school-wide interventions and supplied ongoing support to ensure the success of their faculty. The administrators spearheaded the initial assessments, conducted the preliminary research, articulated the rationale for change, created the vision, rallied support among their respective staffs, and managed nearly every aspect of implementation, including the collection and use of school-wide data. They listened, they problem-solved, and they were visible when times were difficult and less visible when things were going well (Schwahn & Spady, 1998). Indeed, the administrators in these schools were the "social architects" (Block, 2002, p. 171) of the proposed changes and "became the changes they wanted to see in their schools" (Bolman & Deal, 1995, p. 64), meaning that in these two instances, the administrators modeled the changes for their staffs and made the innovations the top priorities in their respective schools.

Although the administrators were the "social architects" of the change initiatives, a small group of key leaders emerged among the staffs, including school psychologists, who became involved in all aspects of the change effort. These individuals, who were respected by their colleagues, took part in the day-to-day implementation of activities, served as "cheerleaders" for the

change, and provided mentorship to staff who needed additional support. Defined by Hall and Hord (1987) as secondary change agents, these small-group leaders are critical for sustaining long-term successful implementation of change efforts.

Teachers

Classrooms in American public schools are typically loosely coupled entities; a structure that provides teachers with a great deal of autonomy within classrooms, especially with regard to discipline (Weick, 1995). In these two school examples, teachers were asked to relinquish some of their autonomy and work together on common agreements for the good of the entire school. As previously described, administrators worked with teachers to develop school-wide expectations and rules, including a structure for intervening in low-level misbehavior that could be used across all the instructional areas within the building.

Common expectations that are defined differentially across different physical settings and implemented consistently across time offer a number of advantages for school environments. For example, messages about acceptable and unacceptable behavior that are repeated frequently over time by all adults in the school setting help students develop an unmistakable and clear understanding of the standards for appropriate conduct. As important, frameworks that lead to consistent and predictable responses, such as the aforementioned class-wide interventions, empower every adult in the school with equal authority for upholding the standards of decorum. A whole-school model is successfully implemented when teachers are empowered to act within the boundaries of the shared vision and expectations that they actively worked to develop, when they hold each other accountable, and when they work together to continuously improve the system (Fullan, 2003).

School Psychologists

School psychologists were not merely participants in the school-wide teams that initiated, designed, and implemented the school reforms; in both schools, the school psychologists emerged as leaders of the group referred to as secondary change agents. In both schools, the roles of the school psychologists were reconfigured and eventually transformed as the school-wide innovations evolved and moved forward. Originally assigned to traditional screening and assessments, discipline, and crisis intervention, the school psychologists eventually took on roles that more closely aligned with the future directions of the schools; that is, the provision of antecedent interventions for *problem prevention* rather than reactive and routine applications of negative consequences after problem behaviors already had occurred. In the alternative school, for example, the school psychologists largely abandoned more traditional roles and functions and replaced the time spent in those endeavors with classroom observations, direct consultation with teachers, and assessments on the degree to which the school-wide and class-wide procedures were being properly implemented. School psychologists also provided professional development in areas such as applied behavior analysis, progress monitoring, functional behavior assessments, PBS plans, charting and graphing students' behavioral progress, and the use of data for making instructional decisions.

A similar transformation of duties occurred for the school psychologist at the elementary school. Like the school psychologists in the alternative school, the elementary school psychologist was originally assigned routine assessments and discipline (i.e., helping the principal process an average of nearly 10 office disciplinary referrals daily). With the advent of the school-wide intervention, the school psychologist's role evolved into one of providing greater support to children who clearly required more assistance to succeed (i.e., those requiring selected/targeted and tertiary-level interventions). Even the location of the school psychologist's work in the elementary school

moved from the main office of the school to within various classrooms, positioning the psychologist to provide greater assistance for teachers with challenging students.

Meeting the new demands placed school psychologists in a role more closely aligned with that of behavioral consultants, working collaboratively with teams of teachers to design interventions for children in need of more assistance. Having previously established "legitimate power" within the schools as quasi-administrative personnel and "expert power" through their respected knowledge of behavioral interventions (Erchul & Martens, 2002), the school psychologists were readily accepted by teachers in their new roles. Moreover, not only did the school psychologists serve as consultants to teachers in these schools but they also served as consultants to the administrative teams. Consequently, the school psychologists were able to have a strong impact on the evolution of the school-wide initiatives, and they became strong advocates for the changes made in the schools.

Resources

Both the alternative and elementary schools committed resources to maximize successful implementation of the school-wide innovations. Fiscal resources were minimal and cost about \$3000 annually above and beyond current budget allocations. The additional expenditures covered store items and awards and prizes for students. Ultimately, the most valuable resources were the training teachers received in research-based methods and the structures school-wide teams helped develop to support the implementation of new skills in everyday practice (Fullan, 2001). Once teachers changed their behavior based on the agreements they reached and the training they received, the new routines and methods became embedded in their teaching repertoires and institutionalized over time in the school settings.

Organizational Restructuring

The agreements reached among school staff during the planning and implementation of the school-wide interventions were codified and written into the schools' policy and procedures manuals. Thereafter, the procedures that were developed prior to and during the school-wide innovation supplied the basis for training newly recruited teachers to the schools. Moreover, once codified, the new procedures were revised annually based on feedback from teachers and staff on the utility, ease of implementation, and effectiveness of the procedures.

While money is important to any change effort, these school examples show that the most important resources were time and training. Teachers needed to learn the skills necessary for successfully doing what was being asked of them, and they needed time to practice the newly learned skills and to receive feedback on how well they were doing. Time for teachers to collaborate, to study data, and make adjustments to their teaching repertoires was a critical resource in the successful implementation of the school-wide model in these schools. In both cases, faculty meeting time was no longer primarily used for "housekeeping information" but instead was reserved for data presentations, discussions troubleshooting specific cases with implementation difficulties, and for updates regarding training on the school-wide model. The administrators signaled to the staffs the importance of the school-wide innovation by allocating time for teachers to learn, practice, analyze, and modify new behaviors. Through time, training, and experience, teachers and other school personnel learned that the key to changing student behavior is to first change staff behavior.

Conclusion

In this article, we described two schools' experiences with whole-school change and identified factors we believe contributed to their success, including the contributions of administrators,

teachers, and school psychologists. Schools are constantly changing. Change begins with the notion that something is not working as well as it should be and that there are better ways to conduct business. Some changes are relatively small in terms of impact, such as the annual attrition rate of teachers; some are quite large, such as the implementation of the requirements of federal legislation such as *No Child Left Behind*. Other changes are profound and transform the core behavior patterns within the school, such as the ones described herein. However, meaningful change is possible only if systems are restructured in a manner that enables change to occur (Deal & Peterson, 1999), and any change, if improperly managed, will not sustain into the future. Change that does not lead to behavioral transformation for both school personnel and students cannot be considered successful (Miller et al., 2005).

REFERENCES

- Alberto, P.A., & Troutman, A.C. (2003). Applied behavior analysis for teachers (6th ed.). Upper Saddle River, NJ: Merrill. Barber, M. (2001, October). Large-scale reform in England. Paper presented at the School Development Conference, Tartu University, Estonia.
- Berends, M., Bodilly, S., & Kirby, S. (2002). Facing the challenge of whole-school reform. Santa Monica, CA: RAND.
- Berman, P. (1981). Educational change: Implementation paradigm. In R. Lehming & M. Kane (Eds.), Improving schools: Using what we know (pp. 253–286). Beverly Hills, CA: Sage.
- Block, P. (2002). The answer to how is yes. San Francisco: Berrett-Koehler.
- Bolman, L.G., & Deal, T.E. (1995). Leading with soul: An uncommon journey of spirit. San Francisco: Jossey-Bass.
- Boyle, B., While, D., & Boyle, T. (2004). A longitudinal study of teacher change: What makes professional development effective? Curriculum Journal, 15, 45–68.
- Carr, E.G., Dunlap, G., Horner, R.H., Koegel, R.L., Turnbull, A.P., Sailor, W., Anderson, J.L., Albin, R.W., Koegel, L.K., & Fox, L. (2002). Positive behavior support: Evolution of an applied science. Journal of Positive Behavior Interventions, 4, 4–16.
- Deal, T.E., & Peterson, K.D. (1999). Shaping school culture. San Francisco: Jossey-Bass.
- Dunlap, G., & Kern, L. (1996). Modifying instructional activities to promote desirable behavior: A conceptual and practical framework. School Psychology Quarterly, 11, 297–312.
- DuPaul, G.J. (2003). Commentary: Bridging the gap between research and practice. School Psychology Review, 32, 178–180.
- Dwyer, K.P., Osher, D., & Warger, W. (1998). Early warning, timely response: A guide to safe schools. Washington, DC: U.S. Department of Education.
- Erchul, W.P., & Martens, B.K. (2002). School consultation: Conceptual and empirical bases of practice (2nd ed.). New York: Kluwer.
- Fogt, J.B., & Piripavel, C.M.D. (2002). Positive schoolwide interventions for eliminating physical restraint and exclusion. Reclaiming Children and Youth, 10, 227–232.
- Freeman, R.L., Smith, C.L., & Tieghi-Benet, M. (2003). Promoting implementation success through the use of continuous systems-level assessment strategies. Journal of Positive Behavior Interventions, 5, 66–70.
- Fullan, M. (1995). The school as learning organization: Distant dreams. Theory Into Practice, 34(4), 230–235.
- Fullan, M. (2001). The "new" meaning of educational change (3rd ed.). New York: Teachers College Press.
- Fullan, M. (2003). Change forces with a vengeance. New York: Routledge Falmer.
- Garmston, R.J. (2002). Standards can guide success in meetings. Journal of Staff Development, Summer, 74-75.
- George, M.P. (2000). Establishing and promoting disciplinary practices at the building level that ensure safe, effective, and nurturing school environments. In L.M. Bullock & R.A. Gable (Eds.), Positive academic and behavioral supports: Creating safe, effective, and nurturing schools for all students (pp. 11–15). Reston, VA: Council for Exceptional Children.
- Gilbert, T.F., & Gilbert, M.B. (1992). Potential contributions of performance science to education. Journal of Applied Behavior Analysis, 25, 43–49.
- Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. Education Administration Quarterly, 43, 124–156.
- Glasser, W. (1990). The quality school: Managing students without coercion. New York: Harper & Row.
- Gottfredson, D.C., Gottfredson, G.D., & Hybl, L.G. (1993). Managing adolescent behavior: A multiyear, multi-school study. American Educational Research Journal, 30, 179–215.
- Hall, G.E., & Hord, S.M. (1987). Change in schools: Facilitating the process. Albany: State University of New York Press.

- Horner, R.H., & Sugai, G. (2000). Schoolwide behavior support: An emerging initiative. Journal of Positive Behavior Interventions, 2, 231–232.
- Horner, R.H., Todd, A., Lewis-Palmer, T., Irvin, L.K., Sugai, G., & Boland, J.B. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior support. Journal of Positive Behavior Interventions, 6, 3–12.
- Individuals With Disabilities Education Act of 2004 (IDEA), Pub. L. No. 108446, 118 Stat. 2647 (2004) [Amending 20 U.S.C. §§ 1400 et seq.].
- Kern, L., & Manz, P. (2004). A look at current validity issues of schoolwide behavior support. Journal of Behavioral Disorders, 30, 47–59.
- Liaupsin, C.J., Jolivette, K., & Scott, T.M. (2004). Schoolwide systems of behavior support. In R.B. Rutherford, Jr., M. Magee Quinn, & S. Mathur (Eds.), Handbook of research in emotional and behavioral disorders (pp. 487–501). New York: Guilford Press.
- Mann, D. (1978). Making change happen. New York: Teachers College Press.
- Marzano, R.J., Waters, T., & McNulty, B.A. (2005). School leadership that works: From research to results. Alexandria, VA: Association of Supervision and Curriculum Development.
- McCloud, S. (2005). From chaos to consistency. Educational Leadership, 62(5), 46-49.
- McDermott, K. (2000). Barriers to large-scale success models in urban reform. Education and Policy Analysis, 22, 85-89.
- Miller, D.N., George, M.P., & Fogt, J.B. (2005). Establishing and sustaining research-based practices at Centennial School: A descriptive case study of systemic change. Psychology in the Schools, 42, 553–567.
- Mirel, J. (1994). School reform unplugged: The Bensenville New American Schools Project. American Education Research Journal, 31, 481–518.
- Mohr, N. (1998). Tools and techniques can build democratic learning from the material of individual ideas and personalities. Journal of Staff Development, 19(3).
- Mohr, N., & Dichter, A. (2001). Building a learning organization. Phi Delta Kappan, 82, 744–748.
- No Child Left Behind Act of 2001. Pub. L. No. 107-110m 115 Stat. 1425 (2002).
- Patterson, D., & Rolheiser, C. (2004). Creating a culture of change. Journal of Staff Development, 25, 1-4.
- Rice, J.K., & Malen, B. (2003). The human costs of educational reform: The case of school reconstitution. Education Administration Quarterly, 39, 635–666.
- Schlaffer, J.J. (2003). Positive schoolwide behavior interventions: A sensible replacement for punishment and coercion. Unpublished manuscript.
- Schwahn, C., & Spady, W. (1998). Why change doesn't happen and how to make sure it does. Educational Leadership, 55, 45–47.
- Senge, P.M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday Curency. Sparks, D. (2001). Why change is so challenging for schools. Journal of Staff Development, Summer, 42–47.
- Sugai, G., & Horner, R.H. (1994). Including students with severe behavior problems in general education settings: Assumptions, challenges, and solutions. In J. Marr, G. Sugai, & G. Tindal (Eds.), The Oregon Conference monograph (pp. 102–120). Eugene: University of Oregon.
- Sugai, G., & Horner, R. (2002). The evolution of discipline practices: Schoolwide positive behavior supports. Child and Family Behavior Therapy, 24, 23–50.
- Sugai, G., Horner, R., & Gresham, F.M. (2002). Behaviorally effective school environments. In M.R. Shinn, H.M. Walker, & G. Stoner (Eds.), Interventions for academic and behavior problems II: Preventive and remedial approaches (pp. 315–350). Bethesda, MD: National Association of School Psychologists.
- Taylor-Greene, S.J., & Kartub, D.T. (2000). Durable implementation of schoolwide behavior support: The high five program. Journal of Positive Behavior Interventions, 2, 233–235.
- Walker, H.M., Horner, R.H., Sugai, G., Bullis, M., Sprague, J.R., Bricker, D., & Kaufman, M.J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. Journal of Emotional and Behavioral Disorders, 4, 194–209.
- Weick, K.E. (1995). Sensemaking in organizations. Thousand Oaks, CA: Sage.
- Yukl, G.A., Wall, S., & Lepsinger, R. (1990). Preliminary report on the validation of the management practices survey. In K.E. Clark & M.B. Clark (Eds.), Measures of leadership (pp. 223–238). West Orange, NJ: Leadership Library of America.

Copyright of Psychology in the Schools is the property of John Wiley & Sons, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.