

Fact Sheet

Positive Behavior Supports (PBS) and School Achievement

School-wide Positive Behavior Supports (SW-PBS or PBS) is a systems approach to improving student behavior and making the school environment more conducive to learning. PBS operates on three levels: a universal level that affects the entire building and is sufficient for most students; a targeted intervention level to support those who need a little more help in learning how to manage their behavior; and an intensive level for students who have serious behavioral problems requiring more intensive, individualized services and supports.

While there is considerable data showing that PBS significantly reduces discipline problems, this issue brief focuses on the impact of PBS on academic achievement, including its impact on a school's progress in meeting academic goals for its students under No Child Left Behind and other state and local education policies.

A number of studies have found a link between school-wide implementation of PBS, fewer discipline problems and improved academic outcomes for students. For example:

- A study analyzing outcomes from 2002 to 2006 in over 100 elementary schools found overall that SW-PBS significantly improved social skills, decreased the amount of time and resources needed to address behavior problems, and resulted in higher test scores and academic achievement.¹
- A study of 22 New Hampshire schools found that after only two years of implementation, 73% of PBS schools had increased math scores on standardized tests. The schools also significantly lowered suspensions and office discipline referrals, allowing schools to recover hundreds of days of instructional time that had previously been lost to behavioral disruptions.²

Comparison Studies Show Success of School-wide PBS

Evaluations of school-wide PBS have documented significant differences in academic achievement between schools that implement school-wide PBS and those that do not. For example:

- A district-wide study of Lane County (Oregon) elementary and middle schools compared those that had implemented school-wide PBS to those that had not. The PBS schools had higher standardized test scores than the others. This finding was all the more impressive since the PBS schools began with lower scores.³

- Maryland’s Anne Arundel County looked at standardized test scores over a five-year period and found that PBS schools had a higher percentage of students who met criteria for “proficient” or “advanced” in reading and math than schools not instituting PBS.⁴
- A study conducted in Illinois found that 62% of 3rd grade students in the schools in which PBS was implemented met the Illinois State Achievement Test Reading Standard. In contrast, only 47% of students met the standard in schools that had not fully implemented PBS.⁵
- A three-year study showed that in an inner city urban school, there not only were reductions in office discipline referrals and suspensions, but corresponding increases in math test scores from baseline to year three.⁶

Factors that Lead to Improved Academic Success

These results are not surprising. Research has consistently found that problem behaviors and a disruptive school climate interfere with academic progress. School wide PBS changes factors that are associated with greater academic achievement, including:

- Increased time in school (behavior problems are effectively prevented or addressed before they result in suspensions or expulsions).
 - A five-year longitudinal randomized control study comparing 21 Maryland schools trained in PBS to 16 untrained schools found reductions in rates of suspensions among PBS schools, whereas the rate in other schools remained unchanged.⁷
- More time for teaching and learning (classroom behavior improves).
 - A 2004 study by Scott and Barrett found that after school-wide PBS implementation at an urban elementary school, the annual rate of office discipline referrals decreased by 562 and suspensions fell by 55 over a two-year period. Estimating a student loses 20 minutes of instructional time with each office discipline referral and a full day of instructional time with each suspension, the gains in instructional times were substantial. The instructional time gained with the decrease in office discipline referrals totaled 29.5 days, while the time gained from fewer suspensions came to 50 days.⁸
- Greater academic engagement (students experience a positive and orderly environment that is not beset by frequent disruptions).
 - A study examining changes associated with PBS found that students were on-task and engaged 24% more during class than before implementation. Not surprisingly, research shows that students who are engaged academically and on-task do better than those who are not. High-achieving high school students who were academically engaged 75% of the time outperformed low-achieving students who were engaged just 51% of the time.⁹

To Achieve Success Schools Must Fully Implement PBS

Findings from several studies in Illinois show that schools that fully implement school-wide PBS have significantly better results, while schools that only partially implement (such as those that put in place only the first, universal level of PBS) do not have that level of success.

- In a longitudinal study lasting eight years, standardized test scores were compared in fully implementing and partially implementing schools. The percentage of students in grades 3, 5, and 8 who met or exceeded criteria for grade-level mastery in math increased significantly over time for all schools implementing PBS. Schools that implemented PBS with fidelity had significantly higher scores in math than schools that were partially implementing PBS.¹⁰
- Schools implementing PBS to a high fidelity had 62 percent of third grade students meeting the reading standard. Schools that had not fully implemented PBS reported having 47 percent of students meeting the standard.¹¹
- In a comparison of 42 fully implementing schools to 186 partially implementing schools, partially implementing schools had a mean of approximately 56 suspension days per 100 students while fully implementing schools had a mean of 26.¹²

PBS Impact on Students with Significant Needs

PBS can be particularly effective for students with significant behavioral problems. Once appropriate, specialized interventions are provided, these students function better and are less likely to be excluded from the general education classroom. When PBS is fully implemented, the needs of students with complex emotional and behavioral difficulties are addressed through student-centered, integrated interventions that comprise community stakeholders, family members, and school staff.

- In a study of intensive interventions for 70 students with significant needs, improvements in the emotional functioning of these students were found both at school and at home.¹³
- Among PBS schools in Illinois implementing intensive individualized interventions for students with significant emotional and behavioral problems, the number of students removed daily from regular classes for more than 60% of the day because of behavioral issues fell from 53,796 in 2006 to 49,924 in 2009.¹⁴
- A PBS elementary school implementing specialized interventions and supports for students with significant behavioral problems had a 55% drop (from 9% to 4%) in the number of students placed in Special Education from the 2005/6 school year to the 2007/2008. In addition, the number of students referred and tested for Special Education dropped 53% (from 13% to 6%).¹⁵

Conclusion

School-wide positive behavior supports, when implemented to fidelity to the model (most importantly, when the school implements all three levels of PBS), not only reduces discipline problems, suspensions and expulsions but improves the schools overall academic outcomes because it creates a climate conducive to learning.

Notes

¹ Eber, L., Esperanza, J., Horner, R. H., Nakasato, J., Smolkowski, K., Sugai, G., et al. (2009). "A Randomized, Wait-List Controlled Effectiveness Trial Assessing School-Wide Positive Behavior Support in Elementary Schools." *Journal of Positive Behavior Interventions*, 11 (3), 133-144.

² Muscott, H., Mann, E., & LeBrun, M. (2008) Positive Behavioral Interventions and Supports in New Hampshire; Effects of Large-Scale Implementation of Schoolwide Positive Behavior Support on Student Discipline and Academic Achievement. *Journal of Positive Behavior Interventions*, Vol. 10, 189-205.

³ R. Putnam, R., Horner, R. & Algozzine, R. Academic Achievement and the Implementation of School-wide Behavior Support. PBIS Newsletter, Volume 3, Issue 1, accessed 7/7/10 at http://www.pbis.org/pbis_newsletter/volume_3/issue4.aspx

⁴ 2008/2009 PBIS in Maryland. Newsletter accessed 7/7/09 at <http://www.pbismaryland.org/documents/PBISMarylandNewsletter20089.pdf>

⁵ Horner, R., Sugai, G., Eber, L., & Lewandowski, H. (2004). Illinois Positive Behavior Interventions and Support Project: 2003-2004 Progress Report. *University of Oregon: Center on Positive Behavior Interventions and Support & Illinois State Board of Education*.

⁶ Ibid.

⁷ Bradshaw, C., Mitchell, M., & Leaf, P. (2009, April). Examining the Effects of Schoolwide Positive Behavioral Interventions and Support on Student Outcomes: Results from a Randomized Controlled Effectiveness Trial in Elementary Schools. *Journal of Positive Behavior Interventions*

⁸ Putnam, R., Horner, R. & Algozzine, R. Academic Achievement and the Implementation of School-wide Behavior Support. PBIS Newsletter, Volume 3, Issue 1, accessed 7/7/10 at http://www.pbis.org/pbis_newsletter/volume_3/issue4.aspx

⁹ Ibid.

¹⁰ Simonsen, B., Eber, L., Sugai, G., Black, A., Lewandowski, H., Sims, B., & Myers, D., (2009). Illinois State-wide Positive Behavioral Interventions and Supports: Evolution and Impact on Student Outcomes across Years. *Manuscript in Preparation*.

¹¹ Horner, R., Sugai, G., Eber, L., & Lewandowski, H. (2004). Illinois Positive Behavior Interventions and Support Project: 2003-2004 Progress Report. *University of Oregon: Center on Positive Behavior Interventions and Support & Illinois State Board of Education*.

¹² FY09 Annual Statewide Report. (2009) *Illinois Positive Behavioral Interventions and Support (PBIS) Network*.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.