



Research Shows Pyramid's Dual Approach Achieves Results

Research demonstrates a strong link between students' academic progress and their behavior in school, but, until recently, most educators addressed the two areas separately.

Cincinnati Public Schools' three-tiered Pyramid of Interventions provides a framework for achieving results in both areas, and those results are significantly greater than when the academic and behavior supports are approached separately without the three-tiered model, according to Seena Skelton, Ph.D., and Karen R. Schaeffer, Ph.D., consultants with Southwest Ohio SERRC (Special Education Regional Resource Center). In addition, they report, schools that implement the pyramid at a high level are more successful in closing achievement gaps for students with disabilities and other at-risk students.

Conclusions from a five-year study* of K-3 students in a Pacific Northwest school district where both behavioral and academic supports were applied in the three-tiered model show:

- Ninety-seven percent of third-graders achieved proficient reading skills, 2 percent were identified as needing strategic support and less than 1 percent as needing intensive support. This compares to a national study of 93 districts, where 60 percent of third-graders achieved reading proficiency, and 24 percent and 16 percent needed targeted and intensive support, respectively.
- A combined approach to academics and behavior using the three-tiered model appears to yield additional benefits in both areas. These efforts make the proportion of students needing additional support vastly more manageable for school personnel.

In the same Pacific Northwest district, a study measuring office discipline referrals (ODRs) for K-5 children was compared to a national database of 90,000 K-5 students. The national database had twice the percentage of students (4 percent vs. 2 percent) in the top tier of students with six or more ODRs.

Other research and conclusions:

- A 50-percent reduction in office discipline referrals after the first year is a typical result in schools that fully implement schoolwide Positive Behavior Supports, according to the U. S. Department of Education's Office of Special Education Programs, Technical Assistance Center.

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- In a study of links between aggressive behavior and academic achievement, results showed that aggressive behavior partly may be a response to failing to achieve in the first grade and that improving achievement can lead to fewer incidents of aggressive behavior. There were small or no improvements when schools focused on the academic or behavioral supports alone.**

The same study concludes: “We have reported evidence that ... improving the experience of mastering reading results in reduction of symptoms of depression, particularly in females, and in less aggressive behavior, particularly in males.”

- A study that examines a schoolwide approach to discipline and early literacy states that, “schools typically don’t gauge the actual performance of *all* of their students but once a year and typically at the end of the school year! (This is) simply inadequate and too late to change the intervention (or investment).”

The same study concludes: “Schools must commit to a systems approach and ‘go to scale’ for the long term if they are to create effective, efficient, and sustainable learning and teaching environments. Schools must create and sustain a continuum of effective instructional and behavioral support to be able to intensify their response to increasingly difficult academic and behavioral challenges.” ***

- DIBELS (Dynamic Indicators of Basic Early Literacy Skills) measures from 137 schools in Ohio implementing a three-tier model for academic and behavior supports show significant improvement from fall to spring on literacy skills of students in grades K-5. (From an external state evaluation of SIG Grant, E. F. Lentz 2006)
- High implementing schools were more successful in closing achievement gaps for at-risk students. (From “Taking OISM (Ohio Integrated Systems Model) to Scale,” a report on the results of applying the three-tiered model in various Ohio schools.)

* McIntosh, K., Chard, D., Boland, J., Horner, R. (Summer 2006) *Demonstration of Combined Efforts in School-Wide Academic and Behavioral Systems and Incidence of Reading and Behavior Challenges in Early Elementary Grades,* *Journal of Positive Behavior Interventions.*

**Kellam, S. G., Mayer, L. S., Rebok, G. W., & Hawkins, W. E. (2003). *Effects of Improving Achievement on Aggressive Behavior and of Improving Aggressive Behavior on Achievement Through Two Preventive Interventions: An Investigation of Causal Paths.* In B. Dohrenwend (Ed.), *Adversity, stress, and psychopathology.* (American Psychiatric Press)

*** Sugai, G., Kame’enui, E., Horner, R., Simmons, D. (2000) *Effective instructional and behavioral support systems: A school-wide approach to discipline and early literacy.* University of Oregon, Eugene: Center on Positive Behavioral Interventions and Supports, and Institute for the Development of Educational Achievement.

