

NH Multi-Tiered System of Supports and Student Problem Behavior

NH schools implementing Multi-Tiered System of Supports

The Multi-Tiered System of Supports for Behavioral Health and Wellness (MTSS-B) model is being implemented in some New Hampshire schools. MTSS-B blends research-based school mental health practices with Positive Behavioral Interventions and Supports (PBIS; see <http://www.pbis.org>). PBIS teaches school-wide behavior expectations at the universal level (Tier 1), offers targeted group support for at-risk students (Tier 2), and provides intensive, individual services for the highest-need students (Tier 3).

Assessing fidelity critical to MTSS-B implementation

NH schools are encouraged to assess MTSS-B implementation fidelity. Fidelity is the degree to which a practice is implemented in a way that is faithful to the model. Assessing fidelity enhances adherence to MTSS-B and supports reflection and quality improvement.¹ NH assesses MTSS-B fidelity using the *Tiered Fidelity Inventory*.²

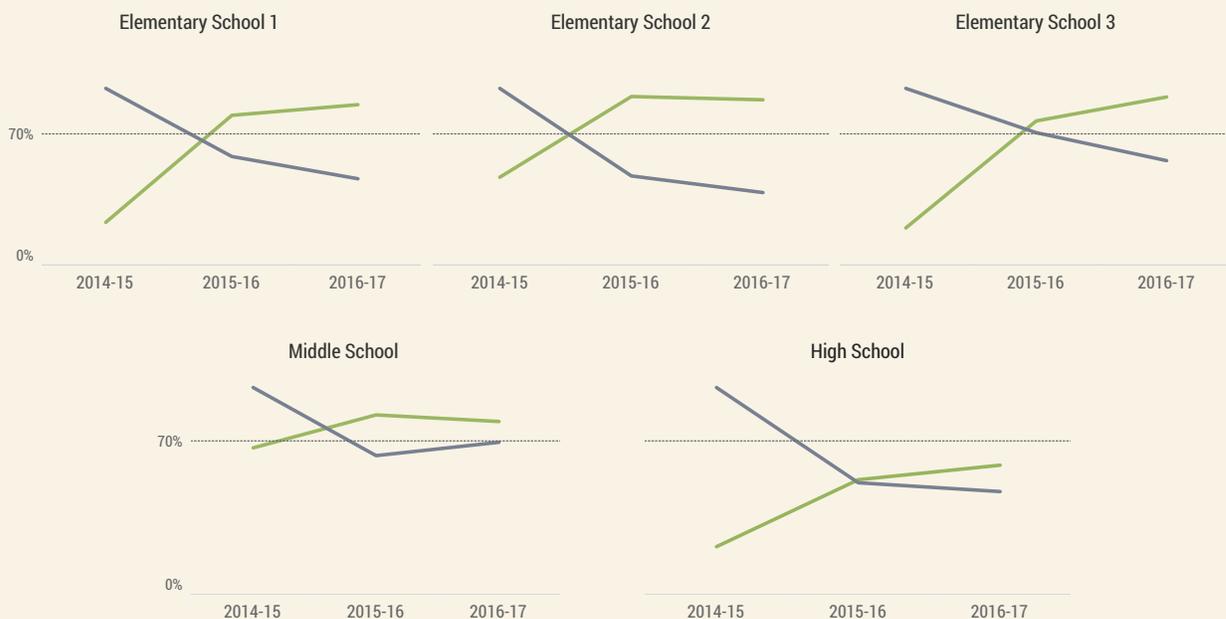
Research links high-fidelity MTSS-B implementation and outcomes

Schools often use office discipline referral (ODR) rates to evaluate student behavior and school climate. ODRs are associated with student aggression, drug use, defiance, behavior disorders, and delinquency.³ Research evidence suggests that MTSS-B fidelity and ODRs (and other important outcomes, like attendance) are linked. MTSS-B is associated with reduced ODR rates, but only when implemented with fidelity.⁴

NH data supports link between MTSS-B fidelity and student outcomes

Data from several NH school districts are highly consistent with the scholarly evidence. The graphic below, from one NH school district where high-fidelity MTSS-B implementation has been an area of major focus, provides a striking illustration. The green lines reflect MTSS-B Tier 1 fidelity over time; a score of 70% is considered “high fidelity.”⁵ The blue lines represent the incidence of ODRs over the same time period. In each school, the lines mirror each other; as MTSS-B fidelity increases, ODRs decrease, and vice versa. **High-fidelity MTSS-B appears to leverage ODRs and other school outcomes.**

MTSS-B Tier 1 fidelity score || Average ODRs per 100 students



Student instructional and administrator time is gained due to reductions in problem behaviors

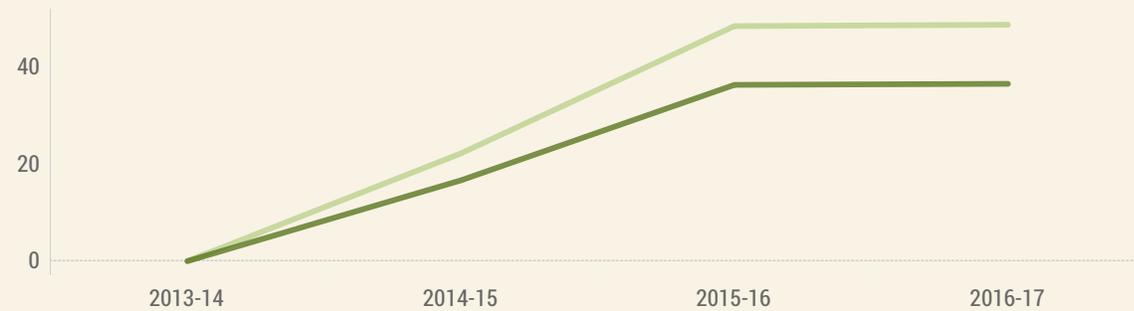
Reducing the incidence of problem behaviors and as a result, the number of ODRs, can increase educational and administrative time in schools. Not only do disruptive students lose learning time when a teacher handles classroom disruption, but other students also lose instructional time.

In order to calculate instructional time gained or lost from year to year, we need to estimate the typical instructional time lost due to absence from the classroom during an ODR, and related administrator time lost due to processing the referral. PBIS Maryland, a longstanding statewide PBIS effort in Maryland schools, established the metric that we have adopted for such estimates: 15 minutes of administrator time and 20 minutes of student instructional time lost, per ODR.⁶

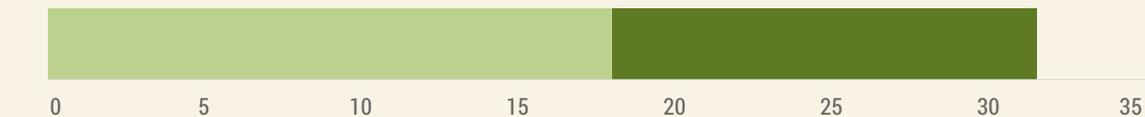
The chart below shows the total amount of administrator and student instructional time gained through reductions in ODRs *per 100 students* over time in the NH school district referenced earlier, aggregated across all schools. The top charts show that time savings went up rapidly in 2014-15 and have been sustained. In total, the school district has saved about 18 school days for students and 13.5 days for administrators *for every 100 students* since implementation of MTSS-B.

Administrator Time Gained || Student Instructional Time Gained

Days gained per 100 students due to fewer ODRs



Days gained per 100 students due to fewer ODRs from baseline to followup



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- ¹ Bruns, E. J., Weathers, E. S., Suter, J. C., Hensley, S., Pullmann, M. D., & Sather, A. (2014). Psychometrics, Reliability, and Validity of a Wraparound Team Observation Measure. *Journal of Child and Family Studies*, 1–13. doi:10.1007/s10826-014-9908-5; Schoenwald, S. K., Garland, A. F., Chapman, J. E., Frazier, S. L., Sheidow, A. J., & Southam-Gerow, M. A. (2011). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 32–43. doi:10.1007/s10488-010-0321-0
- ² Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., Putnam, B., Swain-Bradway, J., McIntosh, K., & Sugai, G. (2014). School-wide PBIS Tiered Fidelity Inventory. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports.
- ³ Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (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. <https://doi.org/10.1177/1098300709332067>
- ⁴ Simonsen, B., Eber, L., Black, A. C., Sugai, G., Lewandowski, H., Sims, B., & Myers, D. (2012). Illinois statewide positive behavioral interventions and supports: Evolution and impact on student outcomes across years. *Journal of Positive Behavior Interventions*, 14(1), 5–16.
- ⁵ Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., Putnam, B., Swain-Bradway, J., McIntosh, K., & Sugai, G. (2014). School-wide PBIS Tiered Fidelity Inventory. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports.
- ⁶ Barrett, S. & Scott, T. (2006). Evaluating time saved as an index of cost effectiveness in PBIS schools. Retrieved from <https://www.pbis.org/common/cms/files/Newsletter/Volume3%20Issue4.pdf>