School-wide Positive Behavior Support Systems: Application of Applied Behavior Analysis in Public School Settings

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School-wide Positive Behavior Support: Effective Implementation and Its Impact in School Settings

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Main Messages

- Applied Behavior Analysis is a compelling and effective technology for assessing and changing behavior.
  - In combination with medical and organizational variables we can use behavior analysis to both change behavior and improve quality of life.

- Getting behavior analysis implemented with (a) fidelity, (b) breadth, and (c) sustainability remains a major challenge.

- Beginning to build implementation systems to improve effectiveness of schools with applied behavior analysis.

(Horner, 2011)
School-wide Positive Behavior Interventions and Supports

- The goal of School-wide Positive Behavioral Interventions and Supports (SWPBIS) is to create schools that are more effective learning environments.

- A framework for establishing the social culture and intensive, individual behavioral supports needed for a school to be an effective learning environment for all students.
Implementation Levels

- Student
- Classroom
- School
- District
- State
What is School-wide Positive Behavior Intervention and Support?

**Evidence-based features of SWPBIS**

- Prevention
- Define and teach positive social expectations
- Acknowledge positive behavior
- Arrange consistent consequences that don’t allow the functions of problem behavior to be achieved
- On-going collection and use of data for decision-making
- Continuum of intensive, individual intervention supports.
- Implementation of the systems that support effective practices
School-wide Positive Behavioral Interventions and Supports (PBIS)

- Build a continuum of supports that begins with the **whole school** and extends to intensive, wraparound support for individual students and their families.
- Implement effective practices with the **systems** needed for high fidelity and sustainability.
Primary Prevention:
School-/Classroom-Wide Systems for All Students, Staff, & Settings

Secondary Prevention:
Specialized Group Systems for Students with At-Risk Behavior

Tertiary Prevention:
Specialized Individualized Systems for Students with High-Risk Behavior

CONTINUUM OF SCHOOL-WIDE INSTRUCTIONAL & POSITIVE BEHAVIOR SUPPORT

~80% of Students

~15%

~5%
Universal

Targeted

Intensive

RTI Continuum of Support for ALL

Few

Some

All
4 PBS Elements

Supporting Staff Behavior

Supporting Student Behavior

Supporting Social Competence & Academic Achievement

Supporting Decision Making

OUTCOMES

SYSTEMS

DATA

PRACTICES

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Effectiveness of School-wide Positive Behavior Supports
Randomized Controlled Trials Examining PBIS


- Reduced major disciplinary infractions
- Improvements in academic achievement
- Enhanced perception of organizational health & safety
- Improved school climate
- Reductions in teacher’s reports of bullying behavior
The Effects of School-wide PBS within a Randomized Control Effectiveness Trial

Horner, Sugai, Smolkowski, Eber, Nakasato, Todd & Esperansa

### Randomized Controlled Trial
(Preliminary Findings)

<table>
<thead>
<tr>
<th>Group</th>
<th>T 1</th>
<th>T 2</th>
<th>T 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment (N = 30)</strong></td>
<td>O</td>
<td>X</td>
<td>O</td>
</tr>
<tr>
<td><strong>Control/Delay (N = 30)</strong></td>
<td>O</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*(T = time (by year), O = observation, X = implementation of SWPBS training)*
Intervention

- Training and technical assistance in developing and implementing a SWPBS plan by each school team
  - Three to five positive worded school rules
  - Teaching matrix for common areas in the school
  - Training staff and students to fluency on these expectations
  - Reinforcement system for students for following the expectations/staff for following the plan
  - Consistent consequences for infractions
  - Data collection system in place for data based decision making
Fidelity of Implementation of SWPBS (with training by regular state trainers)

**Implementation of SWPBS**

- Initial (N = 33)
- Delayed (N = 28)

<table>
<thead>
<tr>
<th>Time</th>
<th>Initial</th>
<th>Delayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>T2</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>T3</td>
<td>0.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>

*Significant differences between initial and delayed training groups.*
Perceived Social Risk Factors decreased when SWPBS was implemented with fidelity.
Percentage of 3rd graders Meeting the State Reading Standard Increased with SWPBS implementation

![Bar chart showing the percentage of 3rd graders meeting the state reading standard at T1, T2, and T3, with initial and delay groups compared.](image)
The TA Center on Positive Behavioral Interventions and Supports has been established by the Office of Special Education Programs, US Department of Education to give schools capacity-building information and technical assistance for identifying, adapting, and sustaining effective school-wide disciplinary practices.

OSEP’s TA Center on PBIS is excited to launch our new website. Please note the site is still under development and information will be posted as soon as it becomes available. Should you have any difficulty locating an item, please contact lori.niffler@pbs.org

Play the Video to Watch Basic SWPBS Features

www.pbis.org
Number of Schools Implementing SWPBIS since 2000

![Graph showing the number of schools implementing SWPBIS since 2000 with a peak of 16,232 in 2011.](image-url)
Number of Schools Implementing SWPBS in New England since 2005

Over 400% Increase
Specific Behaviors at the School Level
Improving Student Bus Riding Behavior Through a Whole-School Intervention

Putnam, Handler, Ramirez-Platt & Luiselli

School Population

- Public elementary school (grades K-5) located in a low socioeconomic urban area.
- On average, there were 624 students enrolled.
- Student composition:
  - 88% African American,
  - 5% Caucasian,
  - 4% Hispanic,
  - 2% Asian/Pacific
- Approximately 90% of students qualified for free/reduced lunch.
Disruptive Bus Behavior

BUS INCIDENT referrals

SUSPENSIONS from the bus

Absence from school

Academic Failure
Dependent Measures

- Dependent measures were the number of bus office referrals and bus suspensions.
- Bus drivers, administrative staff, or teachers recorded an office referral slip when a student
  - got out of seat without permission,
  - threw objects on the bus or out of a window
  - consumed food on the bus
  - “talked back” to the bus driver
  - prevented other students from sitting in a seat
  - destroyed property
  - used obscene language or gestures
  - hit another student.
Research Design

- **Baseline 1**
  - SWPBS plan implemented
    - Expectations defined and taught
    - Reinforcement system implemented
    - Drivers taught the plan

- **Baseline 2**
  - Untrained drivers and plan not implemented

- **SWPBS plan re-implemented**

- **Follow-up**
Bus Riding Office Discipline Referrals and Suspensions

Average Bus Office Referrals and Bus Suspensions Per Day per 100 students

Baseline I

Intervention I

Baseline II

Intervention II

Follow-up

Months

Baseline I

Intervention I

Baseline II

Intervention II

Office Referrals

Suspensions

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Bus Riding Office Discipline Referrals and Suspensions

Average Bus Office Referrals and Bus Suspensions Per Day per 100 Students

- **Baseline I**: August 1999 - January 2000
- **Intervention I**: February 2000 - June 2000
- **Baseline II**: August 2000 - December 2000
- **Intervention II**: January 2001 - March 2001
- **Follow-up**: September 2001 - January 2002

**Legend**
- • Bus Office Referrals
- □ Bus Suspensions
Supporting Implementation of Intensive Applied Behavior Analysis
Research Supporting Implementation of School-wide Positive Behavior Supports

- Preliminary evaluation data indicate that more intensive individual student behavior support is perceived as more effective (and less likely to be needed) when SWPBS is implemented (Medley, Little, & Akin-Little, 2007).
Research Supporting Implementation of School-wide Positive Behavior Supports

- Evaluation (but not experimental) data indicate that implementation of SWPBS is
  - associated with reduction in the number of instances in which intensive interventions or practices (including seclusion and/or restraint) are perceived as needed,
  - increases the effectiveness of comprehensive interventions, and
  - improves the maintenance of behavior support gains (Feinberg, Simonsen & Putnam, 2010).
Main Messages

- SWPBS has increasing evidence of the effectiveness of applied behavior analysis in whole schools.
- The systematic use of SWPBS (applied behavior analysis) in schools will build a learning climate that focusses on:
  - the prevention of problem behavior
  - the teaching of desired and alternative behaviors
  - reinforcement of these behaviors
  - non achievement of functions of problem behaviors
- Preliminary evidence suggests SWPBS will allow the better use of resources to address those students with intensive applied behavior analysis needs.
For more information

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