ORGANIZING AND USING DATA FOR DECISION MAKING AT TIER I

The value of data emerges only when analysis provides insight that directs decisions for students.

—Stephen H. White, Beyond the Numbers, 2005
Organizing and Using Data for Decision Making at Tier I

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2nd Annual
Idaho Positive Behavior Network Conference
“Creating Safe and Effective Schools”
Continuum of Decision Making

Universal—primary prevention provided to all students, effective for approximately 80%

Secondary—targeted, small group
15% of student population

Tertiary—intensive, individualized
5% of student population

All specialized interventions are more effective and more durable with universal, school-wide behavioral expectations as a foundation.
Student-Centered Decision Making

Essential Question:
Is the student successful at this level of support?

Students are not labeled as green, yellow, or red; students are supported with the appropriate level of supports for success.

As intensity of support increases, so does the frequency and intensity of progress monitoring.
Outcome:
Enhanced social competence & academic achievement
Research on PBIS Sustainability

• Schools report administrative support, staff buy-in, fidelity, and data to be enablers of PBIS implementation.

• Common barriers to PBIS sustainability are resources, turn-over, fidelity, and staff buy-in.

The frequency that data are presented to all school staff is the single factor most related to high PBIS sustainability.

Types of data

Fidelity

Outcomes
Adult Behaviors Lead to Student Change

Fidelity

Outcomes
A major feature of SWPBIS is the commitment to ongoing assessment of implementation fidelity.
Overview

PBIS Assessment is a web-based application designed to assist in high-fidelity, sustained implementation of school-wide positive behavioral interventions and supports (SWPBIS). A major feature of SWPBIS is the commitment to ongoing assessment of implementation. PBIS Assessment provides surveys for teams to take as they examine their level of SWPBIS adoption and guides them through the process for how to improve implementation to benefit students, their families, and the overall school culture. Surveys are completed online with reports immediately available as soon as a survey is submitted.

District coordinators use PBIS Assessment to determine which schools are collecting and using data, how schools are progressing, and what support may be of greatest value for any one team. It also allows them to coordinate when teams will take surveys to align with the district’s evaluation plan.

School Login Codes are Now Survey Links

School codes have been replaced by survey links in PBIS Assessment 2. If you are a respondent, please contact your PBIS Coordinator for your link. If you are a coordinator and need to know how to add users or send out links please take a look at the video series link above. The videos in order of appearance are: Manage Multiple Response Surveys, Add Users, and Edit Users.
Overview

- **PBIS Assessment** provides **surveys** for PBIS teams to take as they examine their level of **SWPBIS implementation fidelity** and look for ways to improve systems and practices to benefit students, their families, and the overall school culture.
PBIS Assessment

• Surveys are completed online with reports **immediately** available as soon as a survey is submitted.

• PBIS Assessment is **free** and requires only that someone in the district attend a webinar to learn how to coordinate the surveys.
# Available Assessments

<table>
<thead>
<tr>
<th>Tier</th>
<th>Annual Assessment Tool</th>
<th>Progress Monitoring Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Tiers</strong></td>
<td>Tiered Fidelity Inventory (TFI)</td>
<td>Team Implementation Checklist (TIC)</td>
</tr>
<tr>
<td><strong>Tier 1 (Universal/Primary)</strong></td>
<td>• Tiered Fidelity Inventory (TFI)</td>
<td>• Monitoring Advanced Tiers Tool (MATT)</td>
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<td></td>
<td>• Benchmarks of Quality (BoQ)</td>
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<tr>
<td></td>
<td>• Self-Assessment Survey (SAS)</td>
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<td></td>
<td>• Early Childhood Benchmarks of Quality (ECBoQ)</td>
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</tr>
<tr>
<td><strong>Tier 2 (Targeted/Secondary) &amp; Tier 3 (Intensive/Tertiary)</strong></td>
<td>• Tiered Fidelity Inventory (TFI)</td>
<td>*To be released</td>
</tr>
<tr>
<td></td>
<td>• Benchmarks for Advanced Tiers (BAT)</td>
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</tbody>
</table>

**Outcome Tool:** School Safety Survey (SSS) & School Climate Surveys

*To be released*
## Connecting Fidelity & Outcomes

<table>
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<tr>
<th>Fidelity</th>
<th>Outcomes</th>
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<tr>
<td><strong>Lucky</strong></td>
<td>Positive outcomes, low understanding of how they were achieved</td>
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<tr>
<td><strong>Sustaining</strong></td>
<td></td>
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Why Do We Need Data?

Goal
Make schools more effective learning environments

Strategy
Repeatedly give people the right information, at the right time, in the right format, which is the single most effective way to improve decision making and achieve valued outcomes

Why Behavior?
Social behavior continues to be the single most common reason why students are excluded from schools or instruction.
Performance Gap & Cause Analysis

Performance Gap = The difference between where an organization is and where they want to be.
Performance Gap & Cause Analysis

1. Information
   - Clear expectations
   - Timely, specific feedback

2. Resources
   - Materials, tools
   - Time
   - Processes

3. Incentives
   - Financial & non-financial encouragement

4. Motives
   - Desire to work and excel

5. Capacity
   - Ability to learn and do

6. Knowledge
   - Requisite knowledge and skill base

Environment/ System

Individual/ Person
Data-Based Decision Making

Decisions are more likely to be effective and efficient when they are based upon data.

The quality of decision making depends most on the first step – defining problems to be solved.

- Precise (who, what, where, when, how often, why)
- Clear (general agreement across team)
Improving Decision Making

Primary Problem Statement

Precise Problem Statement

Set Goals & Problem Solve

Solution

Action Planning

Solution
Continuous Quality Improvement

1. Identify current status and problems with precision
2. Establish goal(s)
3. Develop solution(s)
4. Implement solution(s) with integrity
5. Monitor outcomes & compare to goal(s)
6. Implement solution(s) with integrity
7. Evaluate
8. Reassess and revise solution(s) as needed

DATA

Plan

Identify current status and problems with precision
Establish goal(s)
Develop solution(s)
Problem Solving with Precision

• The statement of a problem is important for team-based problem solving.
  • Everyone must be working on the same problem with the same assumptions.

• Problems are often framed in the “primary” form.
  • Raises awareness
  • Not useful for problem solving

• Precise problem statements result from a detailed data review and are solvable.
Problem Solving with Precision

Primary Statements

- There are too many referrals
- Gang behavior is increasing
- The cafeteria is out of control
- Student disrespect is a big problem

Precision Statement

- There are more ODRs for aggression on the playground than last month. These are most likely to occur during first recess, with a large number of students, and the aggression is related to getting access to the new playground equipment.
BUILDING DECISION SYSTEMS

More Than A Data System
Building Decision Systems

Guide schools to build comprehensive “decision systems” not just “data systems.”

<table>
<thead>
<tr>
<th>Data System</th>
<th>Decision System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology that houses data</td>
<td>Agreements on the collection and use of data (including a data system)</td>
</tr>
<tr>
<td>o District student information system (SIS)</td>
<td>Routines and procedures to embed SWIS application data into decision making</td>
</tr>
<tr>
<td>o Excel spreadsheet</td>
<td></td>
</tr>
<tr>
<td>o SWIS application</td>
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</table>
Building Decision Systems

Analyzing data in layers to “drill down”

• What is our current reality?
• Is there a problem? (red flag)
  
  Note: It’s ok to be doing well!
  
• Put the problem into context (get specific).
  what, where, when, who, how often, why
• Be efficient; don’t drown in the data.
Outcomes

Data
Decision-Making Supports

Systems
Staff Behavior Supports

Practices
Student Behavior Supports

Outcomes = Enhanced social competence & academic achievement
What is SWIS?

The School-Wide Information System (SWIS) is a web-based decision system used to improve behavior support in education by providing staff with accurate, timely, and practical information for making decisions about the school environment/climate.
Big Ideas

Make better decisions based on data

• Respond consistently to problem behavior
• Regularly monitor patterns of problem behavior across the school
• Identify contexts (e.g., locations, grade levels, schedules) where more support is needed
• Understand why problem behaviors continue (i.e., perceived motivation or function of the behavior)
• Reduce referral disproportionality by race, ethnicity, disability, gender, and other characteristics
School-wide Behavior Data

- Critical Questions

  - *How often* are problem behaviors occurring?
  - *When* are problem behaviors frequently occurring?
  - *Where* are problem behaviors frequently occurring?
  - *What* problem behaviors are frequently occurring?
  - *Who* is frequently engaging in problem behaviors?
School-wide Behavior Data

September = rate of 3.50 average referrals/day/month
October = rate of 4.53 average referrals/day/month

Spikes at 9:45 AM and 1:00 PM – 2:30 PM

Top 3 non-classroom locations = bathroom, playground, & hallway
Tuesday and Wednesday are the school days with the highest frequency.

Top 3 Problem Behaviors = inappropriate language, defiance, disruption

5th & 8th grades have the highest frequency

25 students have more than 1 referral
Using SWIS Data to Solve Problems

The first step in any problem-solving process is identifying the problem.
Data Analysis for Precision

- Location
- Problem Behavior
- Time of Day
- Persons Involved
- Motivation

Precise Problem Statement
Using SWIS Data to Solve Problems

Problem identification involves identifying the context!

Knowing the context of a problem helps identify relevant solutions!
Each team will have a unique process for drilling down
System vs. Small Group/Individual

**System-Level Problem**
- The context is supporting the problem
- At least 10 students are involved
- At least 10 referrals
- At least 2 staff members agree

**Small Group/Individual Problem**
- We have a specific group or student that needs more instruction or support
- The context is supporting most students, so systems and practices are effective

It’s okay to be doing well and move to another red flag!
Summary... Problem-Identification

- Problem identification involves identifying current red flags and their context.
- Precise problem identification ensures that problems are current and relevant!
- Knowing the context of a problem helps identify relevant solutions.
- Each data analyst and team will have a unique process for drilling down.
## Precise (Solvable) Problem Statements

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What</strong></td>
<td>What problem behavior is occurring?</td>
</tr>
<tr>
<td><strong>Where</strong></td>
<td>Are there locations where the problem is more likely to occur?</td>
</tr>
<tr>
<td><strong>Who</strong></td>
<td>How many students and which sub-groups are more likely to engage in the problem?</td>
</tr>
<tr>
<td><strong>When</strong></td>
<td>Are there times of day or days of week when the problem is more likely to occur?</td>
</tr>
<tr>
<td><strong>Why</strong></td>
<td>In the context above, are students trying to access or avoid something? Is it about attention, tasks/activities, or resources (items)?</td>
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Problem Solving with Precision

- There are more ODRs for aggression on the playground than last month. These are most likely to occur during first recess, with a large number of students, and the aggression is related to getting access to the new playground equipment.

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<tr>
<td>Aggression</td>
<td>Playground</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Recess</td>
<td>Large number of students</td>
<td>To get new playground equipment</td>
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What If I Don’t Have a Way to Drill Down?

• Not all data sources will have efficient tools for drilling down.

• Is there an export tool that allows us to pull data out and then aggregate in Excel or another spreadsheet tool?

• Do we have someone with the expertise (e.g., Excel) and time to help us?

• What other ways can we take the “Drill Down” concept and focus conversations and question more efficiently?
## Goal Setting & Solution Development

<table>
<thead>
<tr>
<th>Essential Elements</th>
<th>Explanation</th>
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</table>
| 1. Prevention      | How can we avoid the problem context?  
| 2. Teaching        | How can we define, teach, and monitor what we want?  
*• Teach appropriate behavior, use problem behavior as the non-example* |
| 3. Recognition     | How can we build in systematic acknowledgment/rewards for positive behavior? |
| 4. Extinction      | How can we prevent the problem behavior from continuing to pay off? *(tied to motivation/function of behavior)* |
| 5. Consequences    | What are efficient, consistent consequences for problem behavior? |
| 6. Evaluation      | How will we collect and use data to evaluate our fidelity and outcomes? |
Solution Development & Action Planning

<table>
<thead>
<tr>
<th>Solution Components</th>
<th>What are the Action Steps?</th>
<th>Who is Responsible?</th>
<th>By When?</th>
<th>How will Fidelity be Measured?</th>
<th>Notes/Updates</th>
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<tbody>
<tr>
<td>Prevention</td>
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<td>Extinction</td>
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<tr>
<td>Corrective Consequence</td>
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Remember to include the precise problem statement as well as a statement of the goal.

<table>
<thead>
<tr>
<th>Data Collection</th>
<th>What data will we look at?</th>
<th>Who is responsible for gathering the data?</th>
<th>When/How often will data be gathered?</th>
<th>Where will data be shared?</th>
<th>Who will see the data?</th>
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www.pbisapps.org
PBISApps Demonstration

PBISApps.org Resources

- Navigation (Applications, Resources, Supports, Demo Accounts)

PBIS Assessment

- Overview
- Demo (coordination, survey set-up, reports)

SWIS

- Overview
- SWIS Demo (Data Entry, Reports, Drill Down)
- CICO-SWIS Demo (Enrollment, Data Entry, Reports)
- ISIS-SWIS Demo (Student File Set-Up, Data Entry, Reports)
For more information...

- Visit [www.pbisapps.org](http://www.pbisapps.org) for more information about any of the PBIS applications or related resources.
  - PBIS Assessment
  - SWIS Suite (SWIS, CICO-SWIS, ISIS-SWIS)
  - PBIS Evaluation
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