Data Shouldn’t Be a Four Letter Word: 
Building Capacity to Use Data in the 
Context of Tier 2 Interventions 

CSMH 2018
About Our Project

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Agenda

• Setting the Stage
  • Sources of School Based Data
• Data-Based Decision Making
• Helping Schools Use Data
• Adaptive intervention Framework
Setting the Stage

Data in Schools
Problem Behavior in the Classroom

• Teachers lose instructional time when addressing problem behavior.

• Students who engage in problem behavior are at risk for academic, social, and emotional deficits.

• To proactively prevent and address problem behavior, schools often organize behavior supports into multi-tiered systems of behavior support (MTSS).
Behavior Supports in a Tiered Framework

• MTSS is a framework of intervention supports that includes a system of data-based decision making procedures.

• Systematic tiered intervention relies on instruction and evidence-based practices to prevent problem behaviors and consistent strategies to respond to problem behaviors to decrease their future frequency.
Sources of School Data

• Office Discipline Referrals
• Universal screeners (e.g., SRSS)
• Clinical judgment
• Academic achievement measures
Data-Based Decision Making
Data-Based Decision Making (DBDM)

Data-based decision making has been used to monitor student academic behavior for decades and can be traced back to the *Precision Teaching* (PT) movement pioneered by Ogden Lindsley in the 1960s and Stan Deno’s Curriculum-Based Measurement.

**Key Features:**

- Regular assessment of student growth
- Graph the data with aim lines and goal lines
- Apply decision rules- a priori decisions to intensify, continue, or fade intervention based on predetermined criteria (e.g., student performance)
DBDM within the Context of MTSS

The use of data to make decisions is an integral part of SWPBIS and enables schools to make informed, objective evaluations of the success or failure of interventions (Sugai & Horner, 2002; Sugai et al., 2000).

• Aids in the long term sustainability of SWPBIS (Coffey & Horner, 2012)
• Allows schools to better match interventions to settings of most need (Nakasato, 2000).
• Uses office discipline referral patterns to identify which tier(s) of support efforts need strengthening (Sugai et al., 2000).
Tier 2 as a Continuum of Supports

A continuum with movement between tiers

A continuum within each tier
Data-Based Decision Making for Tier 2 Interventions

- Within the continuum of Tier 2 supports, DBDM can be used to:
  - SELECT: Use data to select Tier 2 interventions and adaptations
  - ADJUST/INTENSIFY: Make adaptations due to nonresponse
  - FADE: Make adaptations due to response
Potential Barriers to DBDM

Knowledge

Buy-In

Perceptions

Reliance on Clinical Judgment
Helping Schools Use Data
School Site Visits

- 6 Elementary Schools: Texas, Wisconsin, Rhode Island, California, Pennsylvania

- Conducted semi-structured interviews of administrators, psychologists, and teachers

- Questions focused on Tier 2 supports and use of data to make decisions
Results

**Behavior Supports**
- CICO
- Trauma Informed Care
- Responsive Classroom

**Adaptations**
- Tailored expectations
- Modified goals
- Personalized reinforcement

**Use of Data**
- Schoolwide data (ODR)
- Team or teacher decisions—may be based on data but no decision rules

**Barriers to Using Data**
- Time
- Training
- Resources
Case Study: Spring Alexander
Spring Alexander Elementary School

• 312 Students
• PK-4th Grade
• 85% of students receive FRL
• 21% of students with disabilities

<table>
<thead>
<tr>
<th>White</th>
<th>Hispanic/Latino</th>
<th>Black/African American</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1%</td>
<td>20.8%</td>
<td>63.8%</td>
</tr>
</tbody>
</table>
Spring Alexander: Tier 1 Supports

- **PBIS**
  - Implementing for 9 years
  - TFI Score: 93%
  - District-Level PBIS Coach
  - PBIS Tickets
    - Class-wide store to buy special privileges
    - Friday clubs
    - Grade level celebrations
Spring Alexander: Tier 1 Supports

- Leader in Me
  - Explicitly teach 7 Habits
  - Linked to PBIS tickets and expectations
- Recognition and Reinforcement
  - Leaders of the Month
  - Leadership Lounge
  - Sharpen the Saw
Spring Alexander: Tier 1 Supports

• Trauma Informed Care
• Move This World
• Peace Corners
• Peace Path
Is this enough?

Not for everyone!
Data Management

- Tiered Fidelity Inventory (TFI)
- Office Discipline Referrals
- Office Support Calls
- Student Risk Screening Scale (SRSS)
- Absences/Tardies
- Check-in/Check-Out Data
Data Management

Tier 1 Meetings: Monthly

- Key Players: grade level representatives, administrators, PBIS coach, behavior analyst, parent representative
- Data: attendance, office support calls, ODRs, clubs
- Action Steps:
  - Review school-level attendance trends for the month
  - Review class-level patterns in office support calls
  - Review school-level patterns in ODRs
  - Discuss number of students attending clubs
Data Management

Tier 1 Monthly Meeting

• **Problem:** During the month of August, 12 out 12 ODRs happened during arrival time. The majority of these referrals are related to fights happening around the front door while students wait to enter the building at 7:30.

* Solutions? *
Data Management

Tier 2 Meetings: Bi-Weekly

• Key Players: school counselor, administrators, behavior analyst, trauma informed practitioner, social worker
• Data: SRSS Data, CICO Data, absences, support calls
• Action Steps:
  • Review students with 5+ days of unexcused absences
  • Review students with 2+ support calls
  • Review supports for students with moderate to high risk on SRSS
  • Review data for students participating in CICO
Data Management

Tier 2 Bi-Weekly Meeting

- **Problem:** 12 of the 31 students participating in CICO received 2+ support calls in the last two weeks. 8 of the 12 students receiving support calls are also struggling to consistently meet their CICO point goal.

Solutions?
Data Management

• **Tier 3: Support Teams or IEP Meetings**
  - Attendance: parents, teachers, mentor teachers, administrators, other services providers (e.g., behavior specialist, social worker, trauma informed Practitioner)
  - Data: behavior data (e.g., intensity, frequency, time sampling), academic data, progress monitoring data
  - Action Steps: Examine behavioral and academic data for trends. Make changes or develop new plans as needed.
Data Management

Tier 3: IEP or Support Team Meetings

• **Problem:** The student is eloping on average 10 times per day and each episode is lasting an average of 22 minutes.

Solutions?
Adaptive Intervention Framework
Adaptive Intervention Framework (AIF)

• An AIF helps guide the decision-making process when implementing Tier 2 interventions.

• An AIF can help teams:
  • Select an appropriate Tier 2 intervention
  • Monitor student response to an intervention
  • Adapt an intervention’s components

• The use an AIF and data-base decision-making allows teams to intensify the implementation of an intervention due to nonresponse.
Components of an AIF

1. Critical Factors
2. Adaptations
3. Tailoring Variables
4. Decision Rules
Critical Factors

• **Critical Factors:** Specific variables that might make an intervention more or less effective.

• Examples:
  • Student patterns of behavior to tier 1 intervention
  • Specific student characteristics that suggest how a student will respond to intervention
  • Function of behavior.
Adaptations

• **Adaptations:** Based on each identified critical factor, these are modifications or changes to the standard intervention.

• Examples:
  • Increasing the frequency or intensity of an intervention
  • Adjusting the requirements to receive a reward
  • Adding a component to an intervention.
Tailoring Variables

• **Tailoring Variables:** These help determine if and when an intervention should be modified.

• Examples:
  • Student responsiveness to the intervention
  • Teacher preference for a particular intervention
  • Whether the intervention is being implemented as designed
  • Classroom variables that may influence implementation or intervention effectiveness.
Decision Rules

**Decision Rules:** These guide decision making by linking critical factors and tailoring variables. Decision rules allow teams to objectively determine how to adapt an intervention based on each critical factor and when the intervention should be adapted.

**Example:**
- After daily point value of less than 80% on DPR for 2 weeks, meet with team to adapt intervention.
Tier 2 Intervention

• Check-In/Check-Out
Check-In Check-Out
Standard Protocol

1. Daily morning CHECK-IN with adult mentor
2. DPR based on schoolwide expectations or classroom rules
3. Teachers provide FEEDBACK on DPR at end of each class/period
4. Daily afternoon CHECK-OUT with adult mentor
5. DPR sent home to PARENTS
Determining Non-responsiveness CICO
<table>
<thead>
<tr>
<th>Peer Attention Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Is the student engaging in problem behavior to get peer attention?</strong></td>
</tr>
<tr>
<td>Never</td>
</tr>
<tr>
<td>Sometimes</td>
</tr>
<tr>
<td>Often</td>
</tr>
<tr>
<td>Always</td>
</tr>
</tbody>
</table>

**What data do you have to support your answer?**

- [ ] Teacher Report (e.g., clinical judgment)
- [ ] Student Input (e.g., student information)
- [ ] School Records (e.g., ODR, grades, DPR data)
- [ ] Teacher Rating (e.g., screener data, SRSS, BASC, SSIS)
- [ ] Standardized Assessment (e.g., direct test scores)
- [ ] Direct Assessment (e.g., direct observation, CBM)

**How confident are you with your response to question 1?**

- [ ] No confidence
- [ ] Low confidence
- [ ] Average confidence
- [ ] High confidence
# Sources of Data

What data do you have to support your answer? Please fill in the boxes or attach a separate form.

<table>
<thead>
<tr>
<th>Teacher Report</th>
<th>Student Input</th>
<th>School Records</th>
<th>Teacher Rating</th>
<th>Standardized Assessment</th>
<th>Direct Assessment</th>
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</thead>
<tbody>
<tr>
<td>e.g., clinical judgment</td>
<td>e.g., student information</td>
<td>e.g., ODR grades, DPR data</td>
<td>e.g., screener data, rating scales (e.g., SRSS, BASC, SSIS)</td>
<td>e.g., standardized test scores</td>
<td>e.g., direct observation, CBM</td>
</tr>
</tbody>
</table>

How confident are you with your response to question 1?

1. No confidence
2. Average confidence
3. 4
4. 5
5. Very confident
Framework Suggestion

Peer Mentors: Use peer as CICO mentor. Peer checks in and out with student in morning and afternoon. Peer goes over DPR, daily points, and provides reinforcers when earned.

- Is there a responsible peer available to serve as CICO mentor?
  - Yes
  - No

- Is it likely this peer and peer’s parents will provide assent/consent?
  - Yes
  - No

- Will the peer mentor be the same aged or different aged peer?
  - Same aged
  - Different aged
Plan for Intervention

Check-in/Check-out: Adaptation Planning Sheet

1. Adaptation(s) selected:
2. Based on the data available, place a mark along the line that best reflects the average percentage of weekly points currently earned by the student.

Average Percentage of Weekly Points

3. How will the adaptation(s) be made?
   What does this adaptation look like (a description)? Who will be responsible for each adaptation? How often will each adaptation occur? When and where will each adaptation occur? Where will each adaptation occur?

4. What resources are needed to implement the adaptation(s)?
   Are there any resources in this manual that we can use? Are there any resources available in the school? If no, what do we need? Is there a cost associated with the resource(s) needed? Do we need to contact any additional people to obtain the resource(s)? Who will gather the resource(s)/contact necessary people?

5. Is there any training needed prior to implementing the adaptation(s)?
   Who needs to be trained? Who will conduct the training? When will this training occur? Are there any additional supports needed to do the training?
Plan to Progress Monitor

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
<th>Average Number of Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date adaptation(s) will be implemented</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>First review of student’s progress</td>
<td></td>
<td>Goal for First Review: _______</td>
</tr>
<tr>
<td>Second review of student’s progress (if needed)</td>
<td></td>
<td>Goal for Second Review (if applicable): ______</td>
</tr>
<tr>
<td>Final review of student’s progress</td>
<td></td>
<td>Goal for Final Review: _______</td>
</tr>
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</table>
# Other Adaptations

## Check-In/Check-Out

- Peer
- Self-Monitoring
- DPR
- CICO Sessions
- Goal
- Feedback
Summary: Why Adaptive Thinking is Important

• Some students who are nonresponsive to Tier 2 standard protocols may not necessarily need Tier 3 supports. These students are likely to benefit from an adapted Tier 2 intervention.

• **Data-based decision-making** is an iterative process that requires continual collection, monitoring, and analysis of data from multiple sources.

• An AIF facilitates a systematic process for selecting and adapting Tier 2 interventions.
Implications for Practice and Research
Questions?

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