Technology in School Mental Health Assessment: Using DBR Connect™ in Screening and Progress Monitoring

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*Disclosure: Dr. Chafouleas is an author of DBRConnect and receives royalty payments.
Overview of Advanced Skills Session

1. Provide a rationale for measuring student behavior

2. Outline the benefits and limitations of methods for assessing student behavior
   ➢ Extant data
   ➢ Standardized behavior rating scales
   ➢ Systematic direct observation
   ➢ Direct Behavior Rating

3. Summarize research supporting DBR as a screening and progress monitoring tool

4. Demonstrate a technology to assist with DBR use - called DBR Connect
Purposes of Assessment

Screening
- Who needs help?

Diagnosis
- Why is the problem occurring?

Progress Monitoring
- Is intervention working?

Evaluation
- How well are we doing overall?

Emphasized within a Multi-Tiered Service Delivery Framework (RTI)
What is Evidence-Based Practice in Multi-Tiered Systems?

Tier I EBI – Whole school best practices

Tier II EBI – Functionally-Related Small Group Practices

Tier III - Individual Functionally-Based EBI

NOTE – EBI are a very different thing in Tiers 1 and 2 than Tier 3! This is a critical in relation to implications for assessment and evaluation... how to measure student behavior?!?
Methods of Behavior Assessment

- Extant data
- Standardized behavior rating scales
- Systematic direct observation
- Direct Behavior Rating

Historical emphasis in clinic and research
Extant Data

Definition:
▪ Data sources that already exist within the setting (“permanent products”)

Examples:
▪ Office discipline referrals
▪ Attendance records
▪ Data from behavior plans (e.g. token economy)

(Adapted from Chafouleas, Riley-Tillman, & Sugai, 2007)
Benefits & Limitations of Extant Data

- Complements other sources in providing contextually relevant information
- Potential source of progress monitoring information (e.g. ODR > 2)
- Less resource-intensive (data readily available!)

- Limited application within prevention (i.e. ODR means something “big” has happened)
- Tough to establish and maintain consistent/accurate use
  - Unknown psychometric adequacy
- Could be challenging to create a system for efficient organization and interpretation

- Potential source of progress monitoring information (e.g. ODR > 2)
- Less resource-intensive (data readily available!)
**Behavior Rating Scales**

**Definition:**
- Tools that require an individual to rate the behavior of another based on past observation of that person’s behaviors (Kratochwill, Sheridan, Carlson, & Lasecki, 1999).
- Could be broad-based (comprehensive) or narrow (overall screener or construct-restricted)

**Examples:**
- Behavior Assessment System for Children – 3 (BASC-3)
- Achenbach System of Empirically-Based Assessment (e.g. CBCL)
- Conner’s Rating Scales – 3
- Social Skills Intervention System (SSIS)
Benefits & Limitations of Behavior Rating Scales

- May be most helpful in diagnostic (or confirmatory) assessment.
- Provide a common understanding of the specific behaviors that are indicative of a given cluster term.
- May also be suited for use in screening and evaluative assessment practices.

- May not be sensitive to incremental change.
- May be feasible only for occasional use given resources (time/cost).
- Many clinically-focused (i.e., focus on problem rather than pro-social behavior).
- Do not directly assess behavior – rater bias may be present.
**Systematic Direct Observation**

**Definition:**
- Data collected by an observer watching an environment/person for some period of time

**Examples:**
- Percentage of intervals observed to be actively engaged
- Frequency of positive peer initiations throughout the day
- Recording how long it takes to transition in the hallway (duration)
- Frequency of “call-outs”
Benefits & Limitations of SDO

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Highly flexible</td>
<td>• Potential reactivity</td>
</tr>
<tr>
<td>• Useful in progress monitoring</td>
<td>• Observer error/drift</td>
</tr>
<tr>
<td>• Direct measure of behavior</td>
<td>• Limited feasibility (i.e. resources for collecting)</td>
</tr>
<tr>
<td>• Allows for standardized procedures</td>
<td>• Difficult to monitor low frequency behaviors</td>
</tr>
<tr>
<td>• Minimal cost for materials</td>
<td>• Generalizability beyond observation period</td>
</tr>
</tbody>
</table>
We must design evidence-based interventions for all Tiers - and be able to quickly evaluate effects across a range of behavior issues (flexible).

We must have data available to inform decisions - and has to be efficient for collection and interpretation.

We must have ongoing data “streams” to inform decisions – data must be collected systematically and consistently on a repeatable basis.

We must be able to demonstrate that our decisions about student behavior are defensible.
Behavior assessment within RTI frameworks

Current methods of behavior assessment were not built for multi-tiered assessment

New options must possess four desirable characteristics...

Defensible  Efficient  Flexible  Repeatable

Desirable Features

(Chafouleas, 2011; Chafouleas, Christ, & Riley-Tillman, 2009; Chafouleas, Volpe, Gresham, & Cook, 2010)
A viable option for behavior assessment in RTI frameworks...
Direct Behavior Rating

Definition:

• A tool that involves a brief rating of a target behavior following a specified observation period (e.g. class activity) by those persons who are naturally occurring in the context of interest

Examples:

• Behavior Report Card
• Home-School Note
• Daily Progress Report
• Good Behavior Note
• Check-In Check-Out Card
Example Scale Formats for DBR

**Single Item Scale**

**Academically Engaged**

% of Total Time

0% 0 1 2 3 4 5 6 7 8 9 10 100%

**Interpretation:** The student displayed academically engaged behavior during 80% of the observation period.

**Multi-Item Scale**

<table>
<thead>
<tr>
<th>Never</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the student follow class rules?</td>
<td>0</td>
</tr>
<tr>
<td>Did the student follow teacher directions?</td>
<td>0</td>
</tr>
<tr>
<td>Did the student do his/her best work?</td>
<td>0</td>
</tr>
</tbody>
</table>

Total number of points earned: 5

**Interpretation:** The student earned 84% (5/6) of possible points during the observation period.

Source: Chafouleas, Riley-Tillman, & Christ (2009)
RESEARCH: Project VIABLE (2006-2011) and Project VIABLE II (2009-2016)

Develop instrumentation and procedures, then evaluate defensibility of DBR-Single Item Scales in decision-making

Evaluate defensibility and usability of DBR-Single Item Scales in decision-making at larger scale

Funding provided by the Institute of Education Sciences, U.S. Department of Education
How does DBR work?

Interpretation: The student displayed **academically engaged** behavior during 80% of large group math instruction today.

Interpretation: The student received a 6 for **attention** during group circle time activities today.
DBR Targets: “The Big 3” General Outcomes

**Academic Engagement:**
Actively or passively participating in the classroom activity.

**Respectful:**
Compliant and polite behavior in response to adult direction and/or interactions with peers and adults.

**Disruptive Behavior:**
A student action that interrupts regular school or classroom activity.
How do I use the DBR scale?

- Ratings should indicate how much you did the behavior.
- Another way to anchor your rating is to think in terms of Low, Medium, and High.

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

- Never
- Sometimes
- Always
How do I use the DBR scale?

✓ Identify the observation period of interest.
  ✓ E.g. General classroom screening versus progress monitoring of transition time behavior

✓ Make sure the same rater complete all ratings for the pre-identified observation period.
  ✓ E.g. Reading block – primary teacher

✓ The rater should be ready to record ratings as soon as possible following the pre-identified observation period.
  ✓ Only complete the rating if...you are confident you have directly observed the student for a sufficient amount of time

✓ When rating, remember that each behavior is considered independently of the other targets. Total ratings across behaviors do not have to equal 100%.
  ✓ E.g. A student may be engaged 50% of the time, and disruptive 20%. A student may also be engaged for 100% of the time, and disruptive for 10%.
Where can I learn more?

Visit the On-Line Training Module at www.directbehaviorratings.org
Evidence for DBR-SIS Use in for Targeted Screening and Progress Monitoring
DBR-SIS: Applications within Progress Monitoring
INDIVIDUAL STUDENT MONITORING OF RESPONSE: Moderate Behavior Challenge

DBR-SIS in Behavior Consultation Cases

Chafouleas, Sanetti, Kilgus, & Maggin (2012 – Exceptional Children)

Sample: 20 teacher-student dyads in elementary grades

Design and Intervention: A-B intervention involving behavioral consultation and DRC-based intervention. Five options for “change metrics” were calculated.

Measures: researcher-completed SDO, teacher-completed DBR-SIS

Conclusion: Change (in expected directions) in student behavior across phases and sources. High correspondence between DBR-SIS and BOSS absolute change metrics suggests that students were ranked similarly across the two measures with regard to intervention responsiveness. Provides preliminary support for the use of DBR-SIS to differentiate between those who have or have not responded to intervention.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disruptive Behavior</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>4.26</td>
<td>1.97</td>
</tr>
<tr>
<td>Intervention</td>
<td>2.58</td>
<td>1.41</td>
</tr>
<tr>
<td><strong>Academic Engagement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>4.97</td>
<td>2.28</td>
</tr>
<tr>
<td>Intervention</td>
<td>6.82</td>
<td>1.50</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>5.74</td>
<td>1.93</td>
</tr>
<tr>
<td>Intervention</td>
<td>7.34</td>
<td>1.31</td>
</tr>
<tr>
<td><strong>BOSS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-task</td>
<td>69.98</td>
<td>19.76</td>
</tr>
<tr>
<td>Intervention</td>
<td>81.94</td>
<td>14.22</td>
</tr>
<tr>
<td>Off-task</td>
<td>44.82</td>
<td>21.01</td>
</tr>
<tr>
<td>Intervention</td>
<td>28.69</td>
<td>18.54</td>
</tr>
</tbody>
</table>
INDIVIDUAL STUDENT MONITORING: Intensive Behavior Kindergarten Example

Chafouleas, Kilgus, & Hernandez (2009 – Assessment for Effective Intervention)

Sample: full day K inclusive classroom, 2 teachers and 22 students

Measures: teacher-completed DBR-SIS following am and pm over Nov-March for ALL students

Conclusion: “Local” cut-score comparisons can be useful in examining individual student performance. Periodic re-assessment of all may be needed to re-confirm appropriate comparison

<table>
<thead>
<tr>
<th>Target Behavior</th>
<th>Rating Time</th>
<th>FALL M (SD)</th>
<th>SPRING M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Eng. AM</td>
<td>8.72 (1.31)</td>
<td>9.40 (0.63)</td>
<td></td>
</tr>
<tr>
<td>Academic Eng. PM</td>
<td>8.25 (2.03)</td>
<td>9.37 (0.88)</td>
<td></td>
</tr>
<tr>
<td>Disruptive Beh. AM</td>
<td>1.30 (1.47)</td>
<td>0.60 (0.62)</td>
<td></td>
</tr>
<tr>
<td>Disruptive Beh. PM</td>
<td>1.61 (2.08)</td>
<td>0.42 (0.52)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Solid lines represent overall means for Academic Engagement ($M = 8.992$) and Disruptive Behavior ($M = 0.739$) across all student participants.
Riley-Tillman, Methe, & Weegar (2009 – *Assessment for Effective Intervention*)

Sample: First grade classroom with 14 students

Design: B-A-B-A

Intervention: modeling and prompting of silent reading

Measures: researcher-completed SDO, teacher-completed DBR-SIS

Conclusion: DBR data can be sensitive to classroom-level intervention effects, maps closely to resource-intensive SDO

<table>
<thead>
<tr>
<th>Phase</th>
<th>B1</th>
<th>A1</th>
<th>B2</th>
<th>A2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBR</td>
<td>72</td>
<td>45</td>
<td>63</td>
<td>42</td>
</tr>
<tr>
<td>SDO</td>
<td>68</td>
<td>49</td>
<td>61</td>
<td>50</td>
</tr>
</tbody>
</table>
### External Review of PM Characteristics:
National Center on Intensive Intervention
(intensiveintervention.org)

<table>
<thead>
<tr>
<th>Tool</th>
<th>Scale</th>
<th>Reliability</th>
<th>Validity</th>
<th>Disaggregated Reliability and Validity Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior Intervention Monitoring Assessment System (BIMAS)</td>
<td>Academic Functioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior Intervention Monitoring Assessment System (BIMAS)</td>
<td>Cognitive/Attention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior Intervention Monitoring Assessment System (BIMAS)</td>
<td>Conduct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior Intervention Monitoring Assessment System (BIMAS)</td>
<td>Negative Affect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior Intervention Monitoring Assessment System (BIMAS)</td>
<td>Social</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Behavior Rating Single Item Scales (DBR-SIS)</td>
<td>Academically Engaged</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Behavior Rating Single Item Scales (DBR-SIS)</td>
<td>Disruptive Behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **Convincing evidence**
- **Partially convincing evidence**
- **Unconvincing evidence**
- **Data unavailable**
# External Review of PM Characteristics:
National Center on Intensive Intervention
(intensiveintervention.org)

<table>
<thead>
<tr>
<th>Tool</th>
<th>Scale</th>
<th>Sensitive to Student Change</th>
<th>Levels of Performance Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior Intervention Monitoring Assessment System (BIMAS)</td>
<td>Academic Functioning</td>
<td>![Icon]</td>
<td>![Icon]</td>
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<tr>
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<td>Disruptive Behavior</td>
<td>![Icon]</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- ![Icon] Convincing evidence
- ![Icon] Partially convincing evidence
- ![Icon] Unconvincing evidence
- Data unavailable
Summary: DBR-SIS Applications in PM

- Can be a reliable tool to evaluate responsiveness to intervention for moderate intensity behavior

- Can serve to complement to other data sources (e.g. direct observation) that allows for frequent monitoring of intensive behaviors

- Offers a viable option for class-wide monitoring to “check in” on strategy effectiveness

- Has strengths for cross-informant monitoring – increase communication around expectations!
DBR-SIS: Applications within Targeted Screening
### Teacher Referral
- Nomination and notification that there is a problem
  - **Pro:** minimal resources needed
  - **Con:** not proactive – problem usually already significant (e.g. discipline referral)

### Intervention-Based Identification
- Put intervention in place and determine responsiveness
  - **Pro:** high accuracy in establishing significance of problem
  - **Con:** not proactive

### Universal Screening through Normative “Rating”
- Screening applied to **all** students
  - **Pro:** proactive at catching potential problem
  - **Con:** can be resource-intensive (cost, collection time)

### Combination – Multiple Gating
- Combination of options (e.g. teacher nomination followed by normative ratings)
  - **Pro:** potentially proactive and more resource-efficient
  - **Con:** WHICH pieces, WHO/HOW completed, and WHEN?

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Adapted from Walker, Severson, & Seeley (2007)
Remember: Goal is Identifying Risk
BUT Tests are Never Perfect

“Rules” utilized for determining optimal threshold for each grade level and time point

<table>
<thead>
<tr>
<th></th>
<th>Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Worst</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Smallest SN/SP discrepancy</td>
<td></td>
</tr>
</tbody>
</table>

Get the risk identification right for each student!
- Correctly identifying when there is risk
- Avoid missing identifying when there is risk
- Avoid over-identifying risk
- Avoid under-identifying risk
Initial Research Approach: Identify Student Risk using a Single DBR Score

- Promising results for use of DBR-SIS data to inform screening decisions.
- Focus was on each individual DBR-SIS target, or within a gated approach.
- Overall DBR-SIS diagnostic accuracy was consistently in the moderate range.
- AE performed consistently well, particularly in higher grade levels.
- DB performed well in lower grades. Performance in advanced grades varied.

Chafouleas, Kilgus, Jaffery, Riley-Tillman, Welsh, & Christ, 2013
Moving from the Initial Work (Single Scores)… Screening that uses composite - DBR CORE

**Academic Engagement:**
Actively or passively participating in the classroom activity.

**Respectful:**
Compliant and polite behavior in response to adult direction and/or interactions with peers and adults.

**Disruptive Behavior:**
A student action that interrupts regular school or classroom activity.
What is a Composite Score?

**Academic Engagement (0-10)**
AE: Actively or passively participating in the classroom activity.

**Respectful (0-10)**
RS: Compliant and polite behavior in response to adult direction and/or interactions with peers and adults.

**Disruptive Behavior (0-10 – reverse)**
DB: A student action that interrupts regular school or classroom activity.

**Core Composite (0-30)**
C: Sum of scores across individual targets of AE, RS, and DB (reverse scored).

Example: Determining the average individual score
AE-1 8
AE-2 9
AE-3 10
AE-4 6
AE-5 8
AE-6 7
Average 8
Using Composites and Considering Time/Grade-Specific Risk Scores

Johnson, Miller, Chafouleas, Riley-Tillman, Fabiano, & Welsh
(in press - JSP)

**Sample**: Approximately 1800 public-school students enrolled in 192 classrooms in CT, MO, NY
- lower elementary (1st and 2nd),
- upper elementary (4th and 5th)
- middle school (7th and 8th)

**Procedures**: Teacher rated 3x points over school year

**Conclusion**: Composite score functions well...

<table>
<thead>
<tr>
<th></th>
<th>Lower Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AUC [95% CI]</td>
</tr>
<tr>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>.83 [.80, .87]</td>
</tr>
<tr>
<td>DB</td>
<td>.84 [.80, .88]</td>
</tr>
<tr>
<td>RS</td>
<td>.78 [.73, .82]</td>
</tr>
<tr>
<td>C</td>
<td>.85 [.81, .89]</td>
</tr>
</tbody>
</table>
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Conclusion: Composite score functions well... Time point can vary findings....

<table>
<thead>
<tr>
<th>Example</th>
<th>Lower Elementary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cut score (Combined)</td>
</tr>
<tr>
<td>FALL</td>
<td>26.2</td>
</tr>
<tr>
<td>WINTER</td>
<td>26.4</td>
</tr>
<tr>
<td>SPRING</td>
<td>26.5</td>
</tr>
</tbody>
</table>
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### Example

<table>
<thead>
<tr>
<th></th>
<th>Lower Elementary</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cut score</td>
<td>SN [95% CI]</td>
</tr>
<tr>
<td>FALL</td>
<td>26.2</td>
<td>.86 [.79, .92]</td>
</tr>
<tr>
<td>WINTER</td>
<td>26.4</td>
<td>.81 [.74, .88]</td>
</tr>
<tr>
<td>SPRING</td>
<td>26.5</td>
<td>.82 [.74, .89]</td>
</tr>
<tr>
<td>FALL</td>
<td>27.5</td>
<td>.83 [.76, .90]</td>
</tr>
<tr>
<td>WINTER</td>
<td>28.2</td>
<td>.90 [.83, .95]</td>
</tr>
<tr>
<td>SPRING</td>
<td>28.1</td>
<td>.83 [.75, .90]</td>
</tr>
</tbody>
</table>

Summary: DBR-SIS
Applications in Screening

- Can be a reliable tool to identify students at risk for school-based behavior challenges
- DBR CORE composite scores function well in balancing sensitivity and specificity, across time and grade
- Has capacity to combine for use in progress monitoring
- Stay tuned... More data forthcoming on specific recommendations
Moving from Paper to Technology: DBR Connect™
Development of DBR Connect™
Original Website for Information and Training: directbehaviorratings.org

Direct Behavior Rating:
Demonstrating How to Rate Student Behavior

Project Director:
Sandra M. Chafouleas

Project Co-Pls: Chris Riley-Tillman, Greg Fabiano, Megan Welsh, and Hariharan Swaminathan

Design & Development:
Rose Jaffery, Rishi Saripalle, & Austin Johnson

This project was supported in part by a grant from the Institute for Education Sciences, U.S. Department of Education (R324A110017). Opinions expressed herein do not necessarily reflect the position of the U.S. Department of Education, and such endorsements should not be inferred.
New Web-based Option through PAR, Inc

Get acquainted

DBR Connect is a direct behavior rating system that allows users to enter data online and easily screen at-risk students and chart their progress over time.

Learn more

http://www.mydbrcconnect.com/
DBR Roles

Users are given 3 options:

Super Administrators
School Administrators
Teachers
Super Admin Account

Key Functionality

❖ Sets up Schools and School Admin accounts
❖ Purchaser of DBR
❖ Renews annual subscription
❖ Exports district-wide data
School Admin Account

Key functionality
❖ Adding teachers
❖ Adding students
❖ Managing school-wide behaviors
❖ Exporting school-wide data
Teacher Account

Key functionality

❖ Rating individuals
  • Scheduling ratings
  • Defining new behaviors
  • Documenting changes in supports (interventions)

❖ Creating and rating groups of students

❖ Generating charts

❖ Generating reports
Setting Up the System

1. Customer receives price estimate via MyDBRConnect.com website
2. After year/half-year subscription is purchased a Super Admin account is created
3. Super Admin creates Schools and assigns School Admins to accounts
4. School Admin loads teacher and student rosters
5. Teachers customize their rating roster by students and groups
6. Teachers complete ratings and generate reports/charts
DBR Connect Key Features

❖ Screening *and* Progress monitoring
❖ System role hierarchy matches school environment
❖ Ratings take less than 1 minute per student
❖ Research-based cutoff scores to identify at-risk students
❖ Customizable reports and charts with printing options
❖ Unlimited rating and reporting
❖ Replaces educators paper trail with a digital one
❖ Spreadsheet import and export capability
❖ Responsive design that works on a desktop or tablet
DBR Connect™
User Interface
Creating Your Student Roster

**DBR connect**

Role: Teacher
School: Sunshine High School

### Students

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Grade</th>
<th>Type</th>
<th>Rating due</th>
<th>Edit</th>
<th>Rate</th>
<th>Chart</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Amanda</td>
<td>9th</td>
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<td></td>
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<td></td>
</tr>
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<td></td>
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<td></td>
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<td></td>
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</tr>
</tbody>
</table>

*Note: Students cannot be rated unless behaviors are selected on the Edit screen.*
Creating Your Student Roster

Add Student(s) to Rate

<table>
<thead>
<tr>
<th>ID#</th>
<th>Last Name</th>
<th>First Name</th>
<th>Homeroom Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>Sample</td>
<td>QA</td>
<td>Sample, John</td>
</tr>
<tr>
<td>696</td>
<td>Williams</td>
<td>John</td>
<td>Sanders, John</td>
</tr>
<tr>
<td>708</td>
<td>Taylor</td>
<td>Laura</td>
<td>Sanders, John</td>
</tr>
<tr>
<td>720</td>
<td>Anderson</td>
<td>David</td>
<td>Fontenot, Christine</td>
</tr>
<tr>
<td>732</td>
<td>Davis</td>
<td>Linda</td>
<td>DeCarlo, Daria</td>
</tr>
<tr>
<td>744</td>
<td>Thomas</td>
<td>Jennifer</td>
<td>Sanders, John</td>
</tr>
<tr>
<td>756</td>
<td>Moore</td>
<td>William</td>
<td>Sanders, John</td>
</tr>
</tbody>
</table>
Individual Student Ratings vs. Group Ratings

**Individual Student Ratings**
- Ideal for screening or progress monitoring one particular student’s behavior.
- This is often the case for students with Individualized Education Plans (IEPs) or Behavior Intervention Plans (BIPs).
- The teacher sets up a daily and weekly rating schedule to monitor the student’s behavior before, during, and after interventions (e.g., moving his seat, starting counseling).

**Group Ratings**
- Rate multiple students at once.
- Allows teacher to "control" for the common environmental factors (time of day, activity, and subject).
- Can compare students to each other. For example, the teacher can examine if the whole class is displaying high levels of problem behavior or just one student.
Creating Groups

You haven't added any groups yet.

Groups allow you to organize and rate students together rather than individually. Click “Add Group” to get started.
Creating Groups

Add New Group

Group Name: [ ]
- The Group Name is required.

Rating type:
- Screening
- Progress Monitoring

Scheduled Rating(s):
(1 no scheduled group ratings)

Behavior(s) measured:
- Academically Engaged
- Disruptive
- Respectful

Add scheduled rating
Add behavior

Save changes

Cancel
Creating Groups

**Boys Anger Management**

- Rating type: Progress Monitoring
- Behavior(s) measured:
  - Academically Engaged, Cellphone Use, Disruptive, Respectful
- Scheduled rating(s):
  - Weekly, every Wednesday, 10:00 AM to 11:00 AM

**Student(s) being rated**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Last rated</th>
<th># Ratings</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson</td>
<td>David</td>
<td>---</td>
<td>0</td>
<td>7th</td>
</tr>
<tr>
<td>Harris</td>
<td>Joseph</td>
<td>---</td>
<td>0</td>
<td>8th</td>
</tr>
<tr>
<td>Jackson</td>
<td>Richard</td>
<td>---</td>
<td>0</td>
<td>8th</td>
</tr>
<tr>
<td>Miller</td>
<td>Michael</td>
<td>---</td>
<td>0</td>
<td>7th</td>
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</tbody>
</table>

Options:
- Edit
- Rate group
- Create a chart
- Run a report
- Print this page
- Print rating form
## Rating Students

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*Note: Students cannot be rated unless behaviors are selected on the Edit screen.*
Rating Students

Rating for:
- Student name: David Anderson
- Schedule: 2/11/2016, Daily
- Don't rate student

Observation details:
- Time: 09:00am to 09:15am on 2/11/2016
- Format: Large Group Instruction
- Subject: English/Language Arts

Directions: Either enter a numeric value in the box on the left or click on (or drag the circle to) the number that best reflects the percentage of total time the student exhibited each target behavior. Note that the percentages do not need to total 100% across behaviors since some behaviors may co-occur.

**Academically Engaged**
- Value: 5

**Disruptive**
- Value: 3

**Respectful**
- Value: 7

Comments

Change in Support
- Example: Change in classroom support.

Submit rating(s)
Customizing Your Ratings

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*Note: Students cannot be rated unless behaviors are selected on the Edit screen.*

*Reset Due Date(s) on Selected*
Customizing Your Ratings

Anderson, David (Male, 7th Grade, DOB: 05/07/2001)

Homeroom: Christine Fontenot
Rating type: Screening
Scheduled rating(s):
- Daily, 9:00 AM to 9:15 AM
- Daily, 10:00 AM to 10:30 AM

Behavior(s) measured:
- Academically Engaged
- Disruptive
- Respectful

Averages Across Behaviors (out of 10 points)

<table>
<thead>
<tr>
<th></th>
<th>Academically Engaged</th>
<th>Disruptive</th>
<th>Respectful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>3.80</td>
<td>5.40</td>
<td>3.80</td>
</tr>
</tbody>
</table>

Past ratings (click date to expand)

- Thursday, February 11, 2016, 1:00 PM-1:30 PM: Individual
  - Behavior ratings
    - Academically Engaged: 5
    - Disruptive: 3
    - Respectful: 5
  - Comments: Had trouble focusing at the end of group because students in hallway.
  - Change in Supports: (not specified)
Customizing Your Ratings

❖ Schedule upcoming ratings – daily, weekly, or monthly
❖ Decide which behaviors you want to rate
  ❖ 3 core behaviors
  ❖ Additional behaviors that apply to your specific school setting
❖ Categorize students – screening or progress monitoring
Organizing Your Data Electronically

Anderson, David (Male, 7th Grade, DOB: 05/07/2001)

Homeroom: Christine Fontenot
Rating type: Screening
Scheduled rating(s):
- Daily, 9:00 AM to 9:15 AM
- Daily, 10:00 AM to 10:30 AM

Behavior(s) measured:
- Academically Engaged
- Disruptive
- Respectful

Averages Across Behaviors (out of 10 points)

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Past ratings (click date to expand)

- Thursday, February 11, 2016, 1:00 PM-1:30 PM: Individual

Behavior ratings
- Academically Engaged: 5
- Disruptive: 3
- Respectful: 5

Comments
Had trouble focusing at the end of group because students in hallway.

Change in Supports
(not specified)

- Thursday, February 11, 2016, 11:00 AM-11:30 AM: Individual
- Thursday, February 11, 2016, 9:00 AM-9:15 AM: Individual
- Thursday, February 11, 2016, 9:00 AM-10:00 AM: Individual
Additional Features

- Calendar to visually track completed and upcoming ratings
- Reminders sent via email for upcoming ratings
- Ability to set-up school-wide behaviors all teachers can use
- Can use print or electronic rating forms
DBR Connect™
Report Options
Student Information

Student Name: Susy Johnson  
Gender: Female  
Birthdate: June 6, 2009  
Age: 6 years, 1 month

Student ID: 12345  
School: Greenville Elementary  
Homeroom Teacher: Marjorie Murphy  
Grade: 1st grade

Report Details

Date of Report: June 23, 2015  
Rating Period: April 6 – June 1, 2015

Behavior Rater: Marjorie Murphy  
Description of Activity: Small group, Math

Overview of DBR Connect

*DBR Connect™* is a tool that allows for brief and repeated assessment of key classroom behaviors within specific observation periods, such as independent reading or group instruction. DBR Connect results can be used to identify which behaviors are of concern and can help in determining *when*, *where*, and *why* behavior is occurring. It helps examine patterns and variability in behaviors across rating days, learning environments, classroom activities, and other classroom conditions. The three core DBR behaviors are * Academically Engaged*, *Disruptive*, and *Respectful*, and they are rated on a scale from 0 to 10.

**Academically Engaged (AE)** is actively or passively participating in the classroom activity. *Active* engagement can include raising hand, answering a question, *writing*, reading aloud, or talking about a lesson. *Passive* engagement can include listening to the teacher, reading silently, or looking at instructional materials. On this scale higher scores are more desirable.

**Disruptive (DB)** is a student action that interrupts regular school or classroom activity. *Disruptive* behavior can include being out of seat, fidgeting, playing with objects, acting aggressively, or talking/yelling about things that are unrelated to classroom instruction. On this scale lower scores are more desirable.

**Respectful (RS)** is defined as compliant and polite behavior in response to adult direction or interactions with peers and adults. *Respectful* behavior can include following teacher direction, prosocial interaction with peers, positive response to adult request, or verbal or physical disruption without a negative tone/connotation. On this scale higher scores are more desirable.
Reporting Data

Three Options:

1. Individual Screening Report
2. Individual Progress Monitoring Report
3. Group Screening Report
Charting Individuals: Differences Across Behaviors

Laura Taylor Across Behaviors
8/1/2015 - 7/31/2016

Type of Chart:
- Groups
- Individual Student

Select chart type:
- Student Across Behaviors

Student:
- Laura Taylor

Behaviors:
- Academically Engaged
- Disruptive
- Respectful

Optional Behaviors:
- Cellphone Use

Date range:
- Start date: 8/1/2015
- End date: 7/31/2016

Generate Chart
Charting Individuals: Examining Trends Over Time
Charting Groups: Comparing Students

Type of Chart:
- Groups
- Individual Student

Select chart type:
- Group vs. Students

Group:
- Boys Anger Management

Behaviors:
- Academically Engaged
- Disruptive
- Respectful

Optional Behaviors:
- Cellphone Use

Date range:
- Start date: 8/1/2015
- End date: 7/31/2016

Generate Chart
Charting Groups: Student vs. Group Mean

Type of Chart:
- Groups
- Individual Student

Select chart type:
- Student vs. Group

Group:
- Boys Anger Management

Student:
- David Anderson

Behaviors:
- Academically Engaged
- Disruptive
- Respectful

Optional Behaviors:
- Cellphone Use

Date range:
- Start date: 8/1/2015
- End date: 7/31/2016

Chart: David Anderson vs. Boys Anger Management Averages

- Academically Engaged
- Disruptive
- Respectful
- Cellphone Use
Charting Groups: Examining Trends Over Time

Type of Chart:
- Groups
- Individual Student

Select chart type:
- Group over time

Group:
- Boys Anger Management

Behaviors:
- Academically Engaged
- Disruptive
- Respectful

Optional Behaviors:
- Cellphone Use

Date range:
- Start date: 8/1/2015
- End date: 7/31/2016

Graph showing the trend of Boys Anger Management - Academically Engaged Over Time: 8/1/2015 - 7/31/2016.
Using DBR Connect as a Screening Tool

Forest Hill Elementary School decides to use a screening process in which each teacher nominates students who are potentially at risk. Those students will be screened using DBR Connect’s three core behaviors. The school administrator requires teachers to screen at-risk students three times per year (Fall, Winter, and Spring). During each of the screening periods, teachers will observe targeted students in the morning (school start to lunch time) and afternoon (post-lunch to bus time) each day, providing up to 10 opportunities per week. The student support team will review the data after each screening period and use the data to identify children needing additional assessment.
**Disruptive Behavior**

David’s mean disruptive DBR score was 5.7 out of 10. Scores ranged from 3 to 10, with an overall increasing pattern of scores across rating days.

This suggests David’s disruptive behavior is worsening over the course of the rating period. Additional behavior ratings should be collected in other classroom settings to support this pattern.

**David Anderson’s Disruptive Behavior Over Time**

*(8/1/2015 to 7/31/2016)*
Screening Report – Composite and Risk Scores

Composite Score
❖ Sum of the means from the Academically Engaged + Disruptive + Respectful
❖ Each behavior is weighted equally, with DB reverse-scored to be consistent with AE and RS.
❖ Higher overall scores are more desirable. Scores range from 0 to 30.

Risk Level
❖ Indicator of risk associated with the student’s behavior and if further comprehensive behavior evaluation is needed.
❖ A student who falls in the At Risk range suggests he may need additional support in the educational settings and that behavior warrants further attention.

<table>
<thead>
<tr>
<th>Mean Behavior Rating</th>
<th>Composite Score*</th>
<th>Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academically Engaged</td>
<td>Disruptive</td>
<td>Respectful</td>
</tr>
<tr>
<td>3.8</td>
<td>5.7</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At risk</td>
</tr>
</tbody>
</table>
Next Steps

Students who fall in the At-Risk range for Academically Engaged, Disruptive, and Respectful behavior may be good candidates for further assessment, such as additional observational data or comprehensive behavior rating scales. As part of a comprehensive assessment, it is important to hypothesize and then systematically identify reasons for the academic or behavior problems. Once selected, these reasons are then used to select interventions. Evidence-based interventions (EBI) can be selected from the EBI Network page (http://ebi.missouri.edu/). The following chart provides a list of common reasons for academic and behavior problems, along with EBIs that address those concerns.

<table>
<thead>
<tr>
<th>Common reasons for academic problems</th>
<th>Academic interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The academic activity is too hard</td>
<td>Academic acquisition interventions</td>
</tr>
<tr>
<td>Student has not had enough help to do it</td>
<td>Academic proficiency (accuracy) interventions</td>
</tr>
<tr>
<td>Student has not spent enough time doing it</td>
<td>Academic proficiency (speed) interventions</td>
</tr>
<tr>
<td>Student has demonstrated the skill before but has difficulty applying the skill in a new setting</td>
<td>Academic generalization interventions</td>
</tr>
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<thead>
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<th>Common reasons for behavior problems</th>
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<tbody>
<tr>
<td>Student has not learned the behavior</td>
<td>Behavioral acquisition interventions</td>
</tr>
<tr>
<td>Student is trying to get something (e.g., attention)</td>
<td>Behavioral proficiency interventions</td>
</tr>
<tr>
<td>Student is trying to escape something (e.g., an academic task demand)</td>
<td>Behavioral proficiency interventions</td>
</tr>
<tr>
<td>Student does not want to do it</td>
<td>Behavioral fluency interventions</td>
</tr>
<tr>
<td>Student has demonstrated the behavior before but has difficulty displaying the behavior in this setting</td>
<td>Behavioral generalization interventions</td>
</tr>
<tr>
<td>Majority of the students are misbehaving in class</td>
<td>Class-wide behavioral interventions</td>
</tr>
</tbody>
</table>

Mrs. Smith wants to monitor Johnny’s disruptive behavior in class. He always seems to be distracted, out of his seat, and disrupting classmates. She decides DBR Connect would be a good way to keep track of Johnny’s problems within the classroom. Mrs. Smith decides to use the three-core behavior form and adds a more specific optional behavior called “out of seat.” She rates Johnny using DBR Connect during his three most problematic times of day (e.g., silent reading, math, and science). Mrs. Smith rates his behavior immediately following the observation time. After three weeks of data collection, Mrs. Smith is able to assess Johnny’s behavior and look for patterns (e.g., mornings are his most problematic time; he is out of his seat most often during independent seatwork). She decides on an intervention plan (e.g., Johnny can earn 10 minutes of computer time at the end of the day if he remains in his seat 80% of the time during morning silent reading and math seatwork), and she continues to track Johnny’s behavior using DBR Connect to monitor his improvement.
Charting Individual Progress Monitoring

QA Sample’s Disruptive Behavior Over Time
(8/26/2016 to 9/2/2016)
DBR Connect™
Summary
DBR is Flexible

1. Add your own behaviors and definitions to the core 3.

2. Use either paper or computer to log observations.

3. Use a variety of devices and browsers to manage student data, display charts, etc.

4. DBR will grow and evolve, but you will always have the latest version.
Why do I need data?

At what level should the problem be solved? (Primary, Secondary, Tertiary)

What is the purpose of assessment? (Screening, Progress Monitoring, Evaluation, Diagnosis)

Which data do I need?

Which tools are best matched to assess the behavior of interest? Contextual relevance

What decisions will be made using these data? Psychometric Adequacy

What resources are available to collect data? Usability

Which tools can answer these questions?

Adapted from Chafouleas, Riley-Tillman, & Sugai, 2007
SUMMARY: Behavior Assessment Methods within RTI

ALL BELOW, with emphasis on functional assessment data

EXTANT DATA
BEHAVIOR RATING SCALES
SYSTEMATIC DIRECT OBSERVATION
DIRECT BEHAVIOR RATING

EXTANT DATA
BEHAVIOR RATING SCALES developed for universal screening
DIRECT BEHAVIOR RATING