Direct Behavior Rating: Use in Targeted Screening of Student Behavior

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Purpose:

- To review critical features of Direct Behavior Rating (DBR) as a flexible, defensible, repeatable and efficient approach to behavior assessment
- To understand how DBR might be applied within multi-tiered models of service delivery (RTI) – assessment for screening and progress monitoring purposes.
- To learn about recent research to support DBR use in targeted screening assessment, and to acquire practical knowledge about how to use DBR in screening assessment.
- To build skill in using DBR within decision making about student behavior supports.

Purposes of Assessment

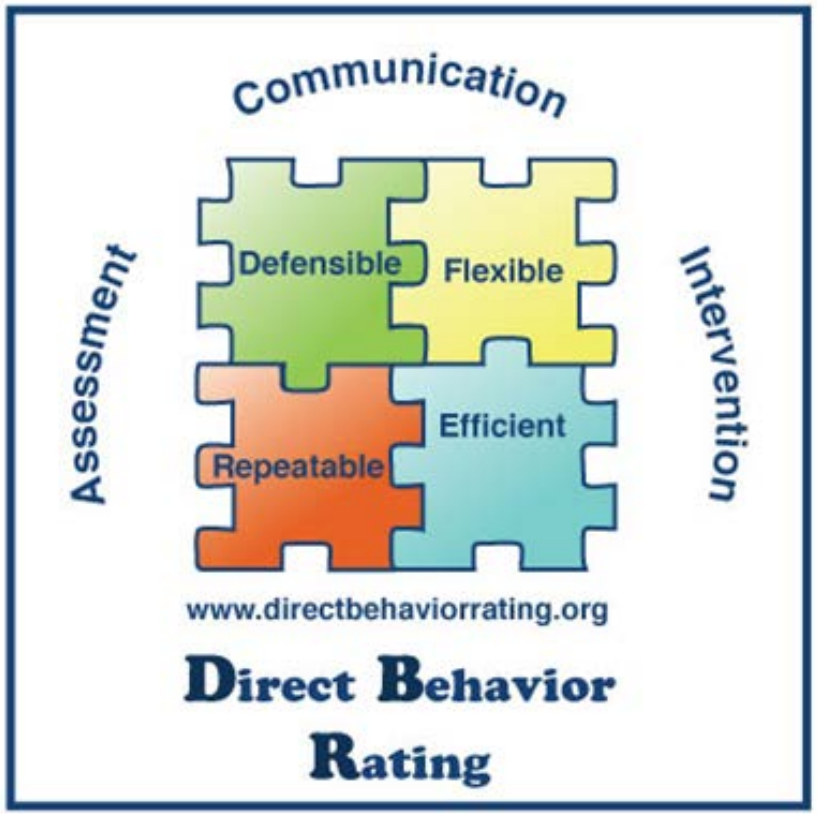
- Screening
  - Who needs help?
- Diagnosis
  - Why is the problem occurring?
- Progress Monitoring
  - Is intervention working?
- Evaluation
  - How well are we doing overall?

Emphasized within a Multi-Tiered Service Delivery Framework (RTI)

Behavior assessment within RTI frameworks

- Current methods of behavior assessment were not built for multi-tiered assessment
- New options must possess four desirable characteristics…

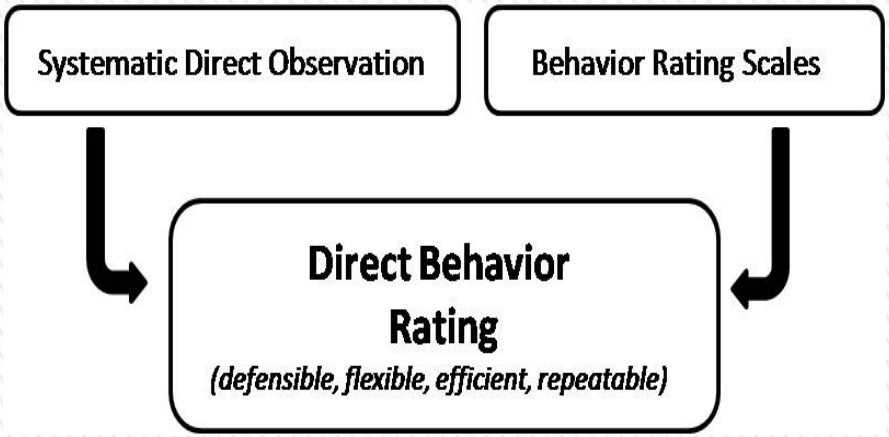
(Chafouleas, 2011; Chafouleas, Christ, & Riley-Tillman, 2009; Chafouleas, Volpe, Gresham, & Cook, 2010)



Direct Behavior Rating as an option…

DIRECT BEHAVIOR RATING : What is DBR?

An emerging alternative to systematic direct observation and behavior rating scales which involves *brief rating* of target behavior following a specified observation period



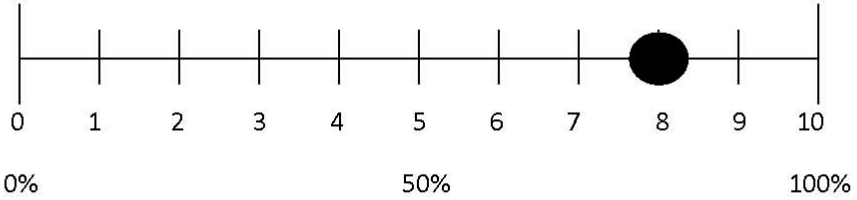
Chafouleas, Riley-Tillman, & Christ (2009); Chafouleas, Riley-Tillman, & Sugai (2007); Chafouleas, Riley-Tillman, & McDougal (2002); Christ, Riley-Tillman, & Chafouleas (2009)

Example Scale Formats for DBR

Single Item Scale

Academically Engaged

% of Total Time



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

Multi-Item Scale

	Never		Always
Did the student follow class rules?	0	(1)	2
Did the student follow teacher directions?	0	1	(2)
Did the student do his/her best work?	0	1	(2)

Total number of points earned: 5

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

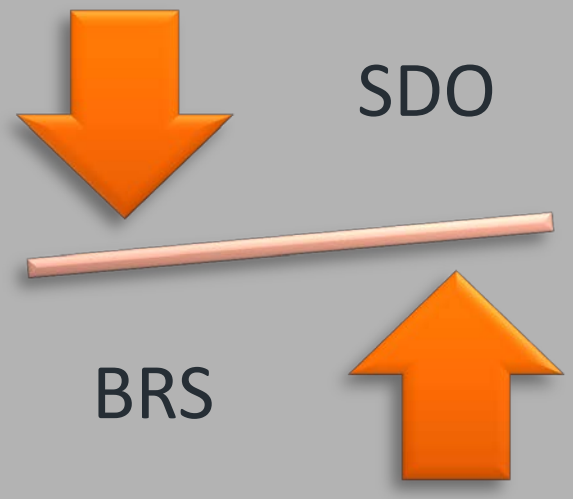
Source: Chafouleas, Riley-Tillman, & Christ (2009)

A little background…

Other Names for DBR-like Tools:

- Home-School Note
- Behavior Report Card
- Daily Progress Report
- Good Behavior Note
- Check-In Check-Out Card
- Performance-based behavioral recording

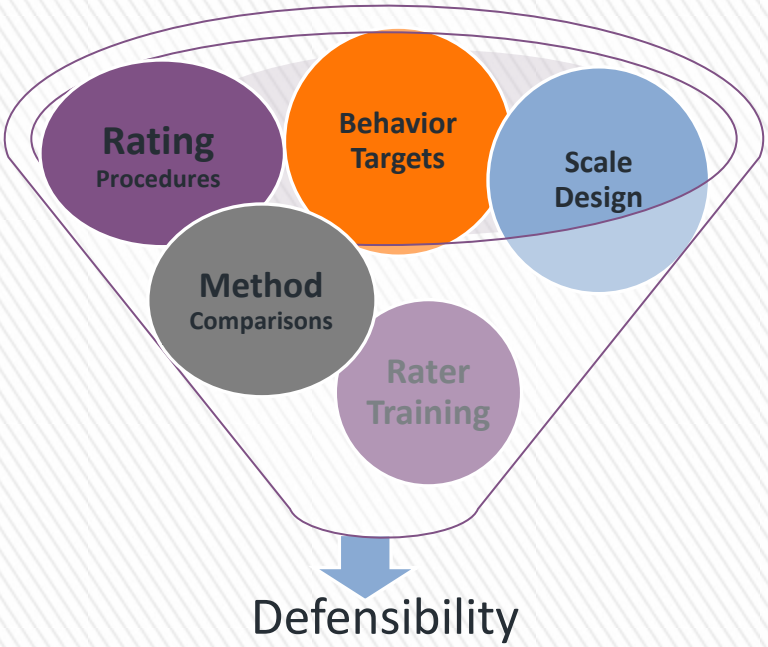
Contemporary Defining Features:



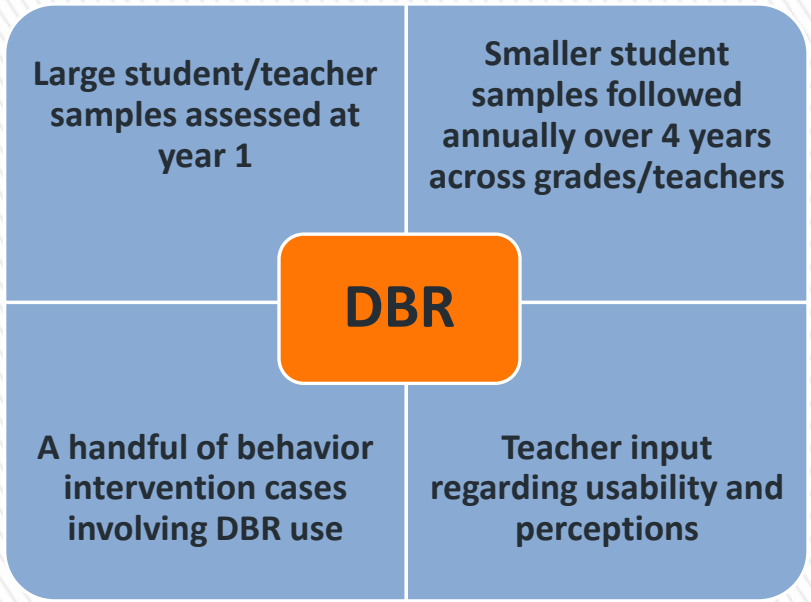
Used repeatedly to represent behavior that occurs over a specified period of time (e.g., 4 weeks) and under specific and similar conditions (e.g., 45 min. morning seat work)

RESEARCH: Project VIABLE (2006-2011) and Project VIABLE II (2009-current)

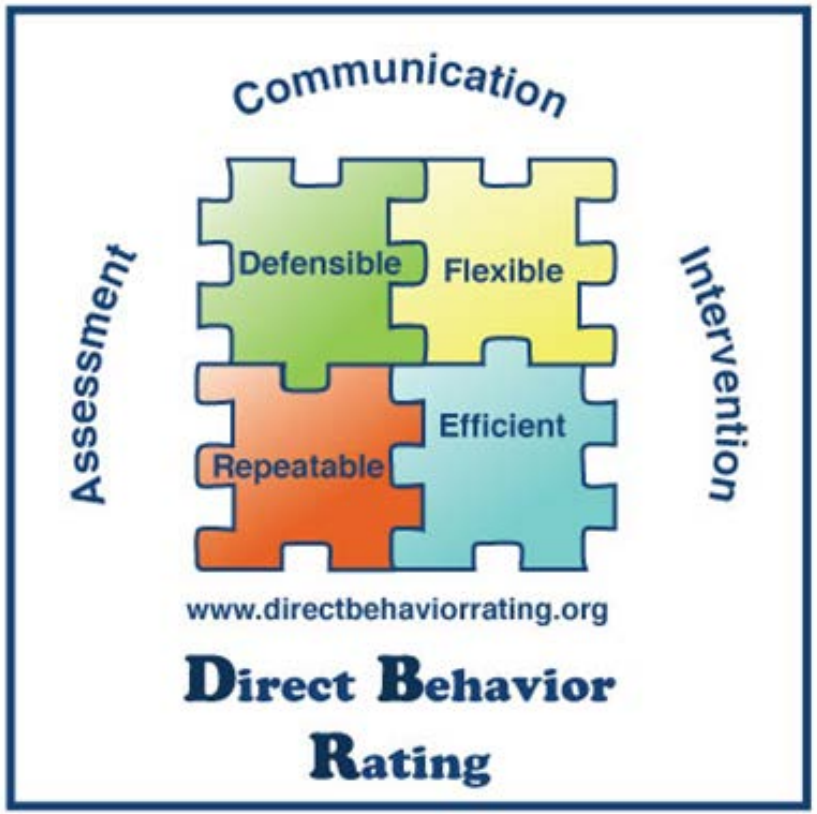
Develop instrumentation and procedures, then **evaluate** defensibility of DBR in decision-making



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



Funding provided by the **Institute for Education Sciences**, U.S. Department of Education

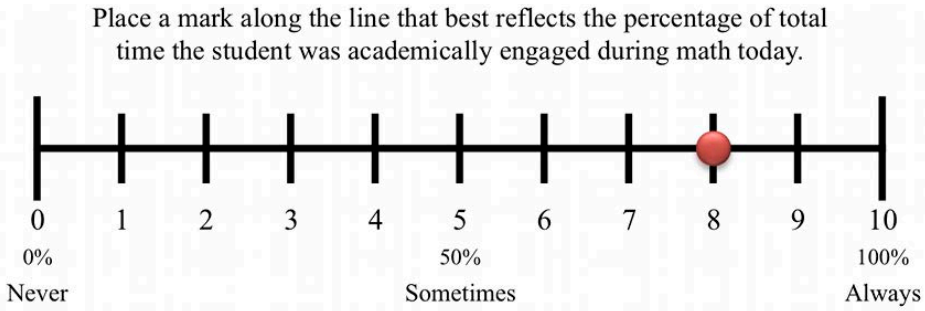


How does DBR work?

DBR Structure: Example scales

Academically Engaged

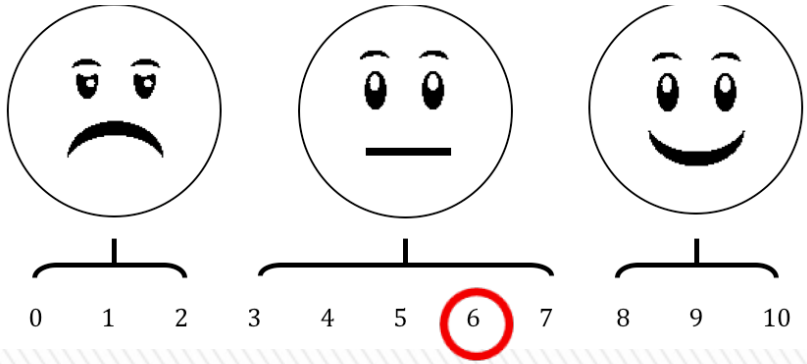
Place a mark along the line that best reflects the percentage of total time the student was Academically Engaged during math today.



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

Academically Engaged

Circle the number that best represents the student's attention during circle time.



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.

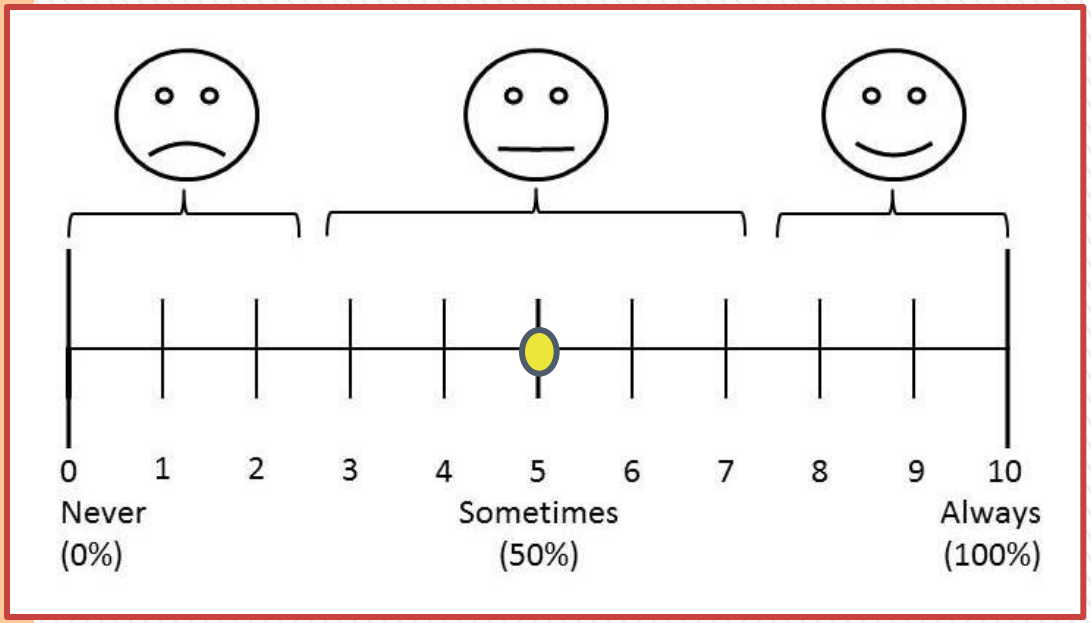
Respectful:
Compliant and polite behavior in response to adult direction and/or interactions with peers and adults.

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.
- *For example*: During Independent Reading, if you paid attention about half of the time, that would be like a so-so face – and you could give a rating of 5.

Academically Engaged



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.

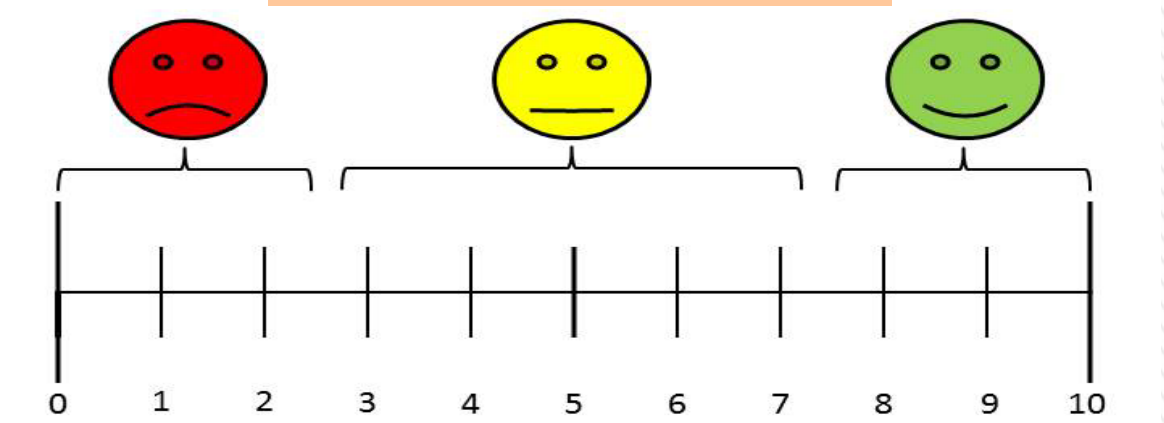
Low			Medium					High		
0	1	2	3	4	5	6	7	8	9	10
Never					Sometimes					Always

How do I use the DBR scale?

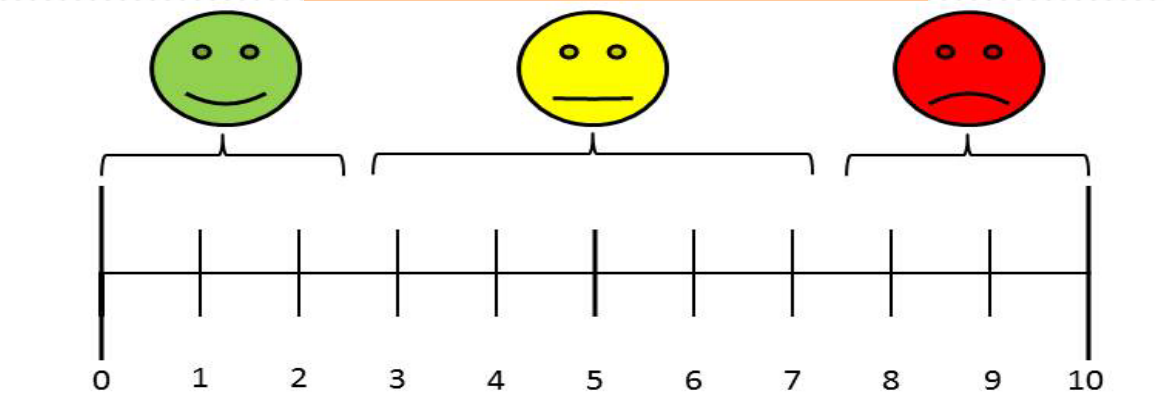
- BEFORE rating, pay attention to the **behavior** and the **scale**.

For example, ***lower*** score for 'Disruptive' shows better behavior, whereas a ***higher*** score on the other items indicates better behavior.

Academically Engaged



Disruptive



Other Helpful Hints...

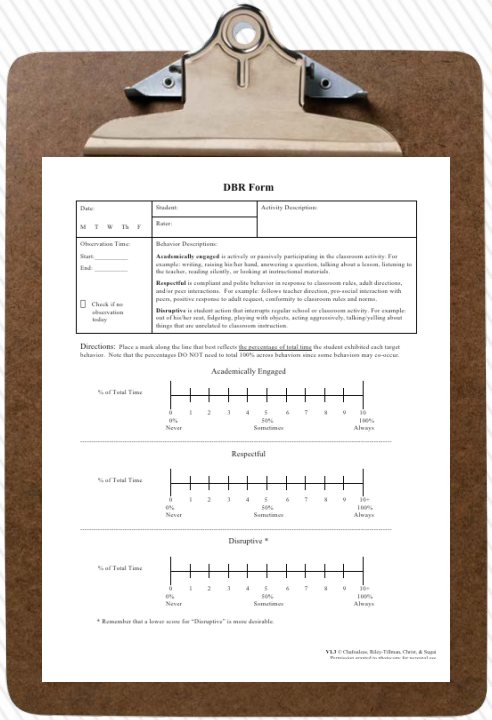
1) Complete top portion of the form, and review the behavior definitions and rating directions

Direct Behavior Rating (DBR) Form: 3 Standard Behaviors

Date: M T W Th F	Student: Rater:	Activity Description:
Observation Time: Start:_____ End: _____ ☐ Check if no observation today	Behavior Descriptions: **Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials. **Respectful** is defined as compliant and polite behavior in response to adult directions and/or peer interactions. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, verbal or physical disruption without a negative tone/connotation. **Disruptive** is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.	

2) Have the form ready for completion following each pre-identified observation period

- For example: Reading block, independent seat work



DBR Form

Date: M T W Th F	Student: / Rater:	Activity Description:
Observation Time: Start:_____ End:_____ ☐ Check if no observation today	Behavior Descriptions: **Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising his/her hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials. **Respectful** is compliant and polite behavior in response to classroom rules, adult directions, and/or peer interactions. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, conformity to classroom rules and norms. **Disruptive** is student action that interrupts regular school or classroom activity. For example: out of his/her seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.	

Directions: Place a mark along the line 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

% of Total Time: 0 1 2 3 4 5 6 7 8 9 10 — 0% Never, 50% Sometimes, 100% Always

Respectful

% of Total Time: 0 1 2 3 4 5 6 7 8 9 10+ — 0% Never, 50% Sometimes, 100% Always

Disruptive *

% of Total Time: 0 1 2 3 4 5 6 7 8 9 10+ — 0% Never, 50% Sometimes, 100% Always

* Remember that a lower score for "Disruptive" is more desirable.

YLI © Chafouleas, Riley-Tillman, Christ, & Sugai

3) Immediately following the activity period, complete the ratings.

- ✓ Only complete the ratings if…
- ✓ you are confident you directly observed the student for a sufficient amount of time
- ✓ you are able to complete the form soon after the end of the activity

Date: M T W Th F	Student: Rater:	Activity Description:
Observation Time: Start:_____ End: _____ ☐ Check if no observation today	Behavior Descriptions: **Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials. **Respectful** is defined as compliant and polite behavior in response to adult directions and/or peer interactions. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, verbal or physical disruption without a negative tone/connotation. **Disruptive** is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.	

4) Immediately following the activity period, complete the ratings.

- ✓ Only complete the ratings if…
- ✓ you are confident you directly observed the student for a sufficient amount of time
- ✓ you are able to complete the form soon after the end of the activity

Date: M T W Th F	Student: Rater:	Activity Description:
Observation Time: Start:_____ End: _____ ☑ Check if no observation today	Behavior Descriptions: **Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials. **Respectful** is defined as compliant and polite behavior in response to adult directions and/or peer interactions. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, verbal or physical disruption without a negative tone/connotation. **Disruptive** is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.	

Let's Practice…

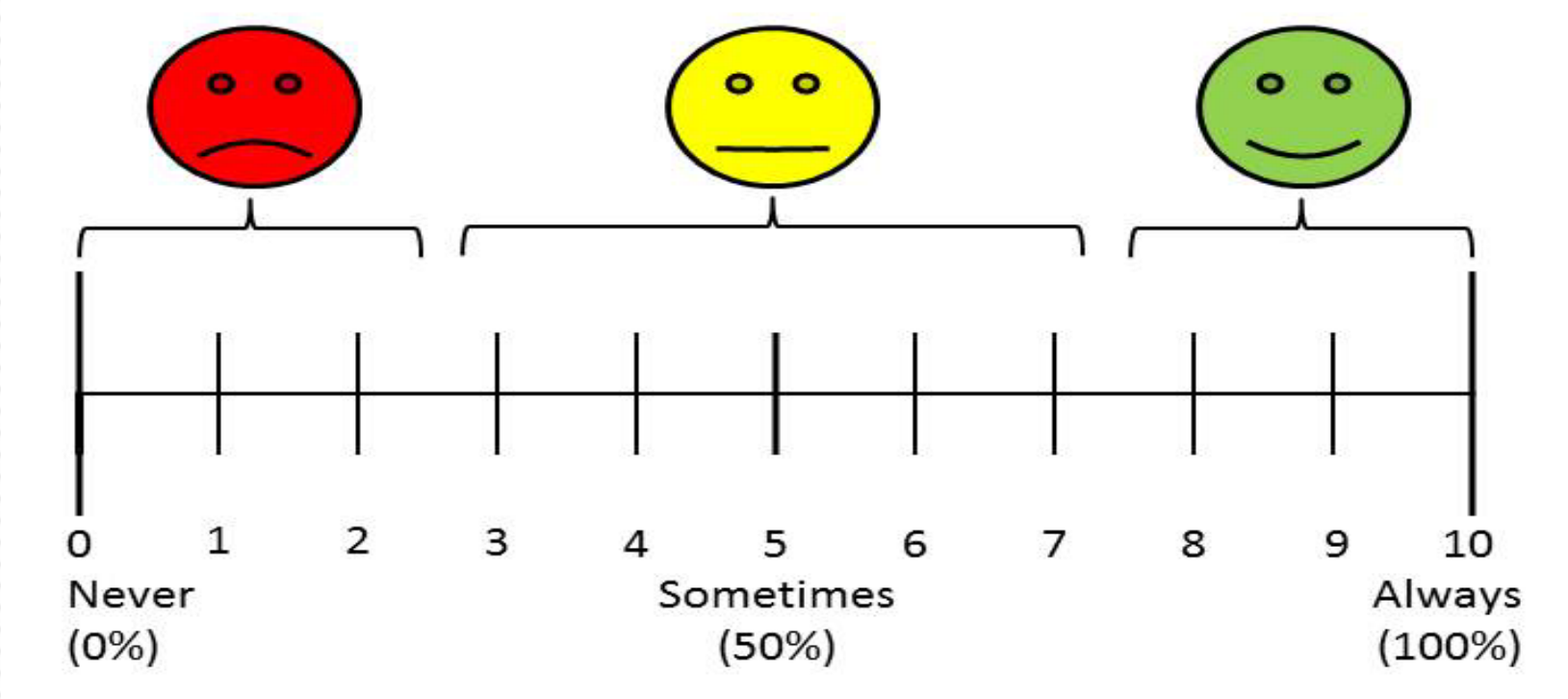
» **Academically Engaged:**

Participating in the classroom activity.

- *Examples*: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials.

Following the video, we will rate Jessie's Academically Engaged behavior

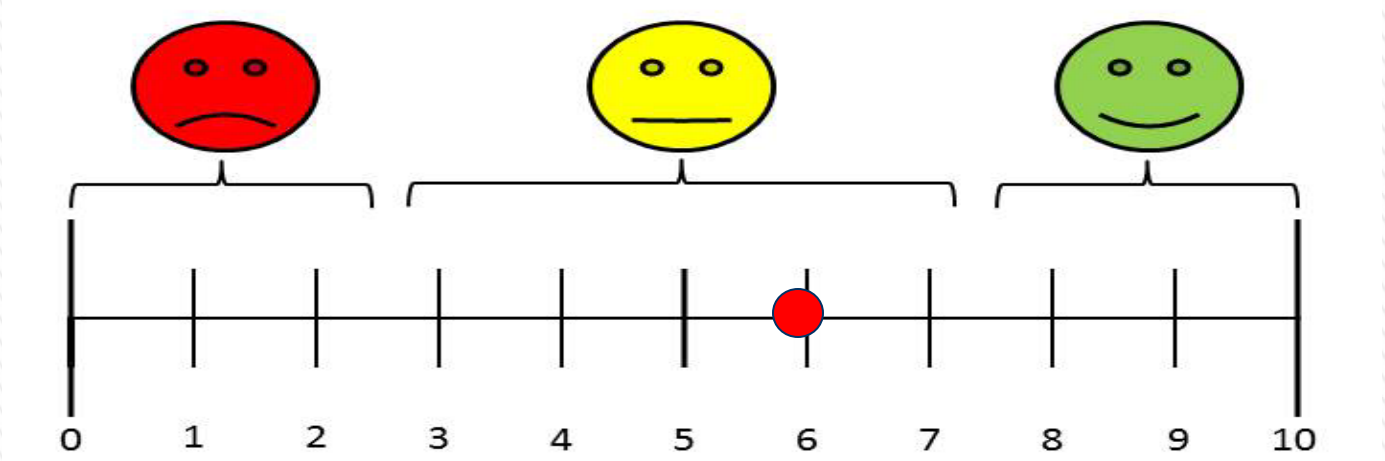
How would you rate Jessie's **Academically Engaged** behavior?



Academically Engaged

Participating in the classroom activity.

For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials.



Low			Medium					High		
0	1	2	3	4	5	6	7	8	9	10
Never	Occasionally		A little less than half the time		Sometimes	A little more than half the time		Very frequently		Always

More Practice Opportunities…

Visit the On-Line Training Module at www.directbehaviorratings.org

Direct Behavior Rating:

Use in Assessment of Student Behavior

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

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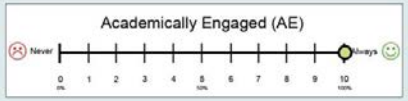
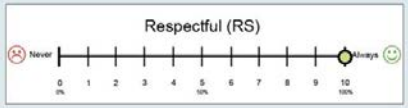
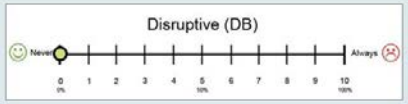
Following the video, we will rate Bob's Respectful behavior

Correct Score:

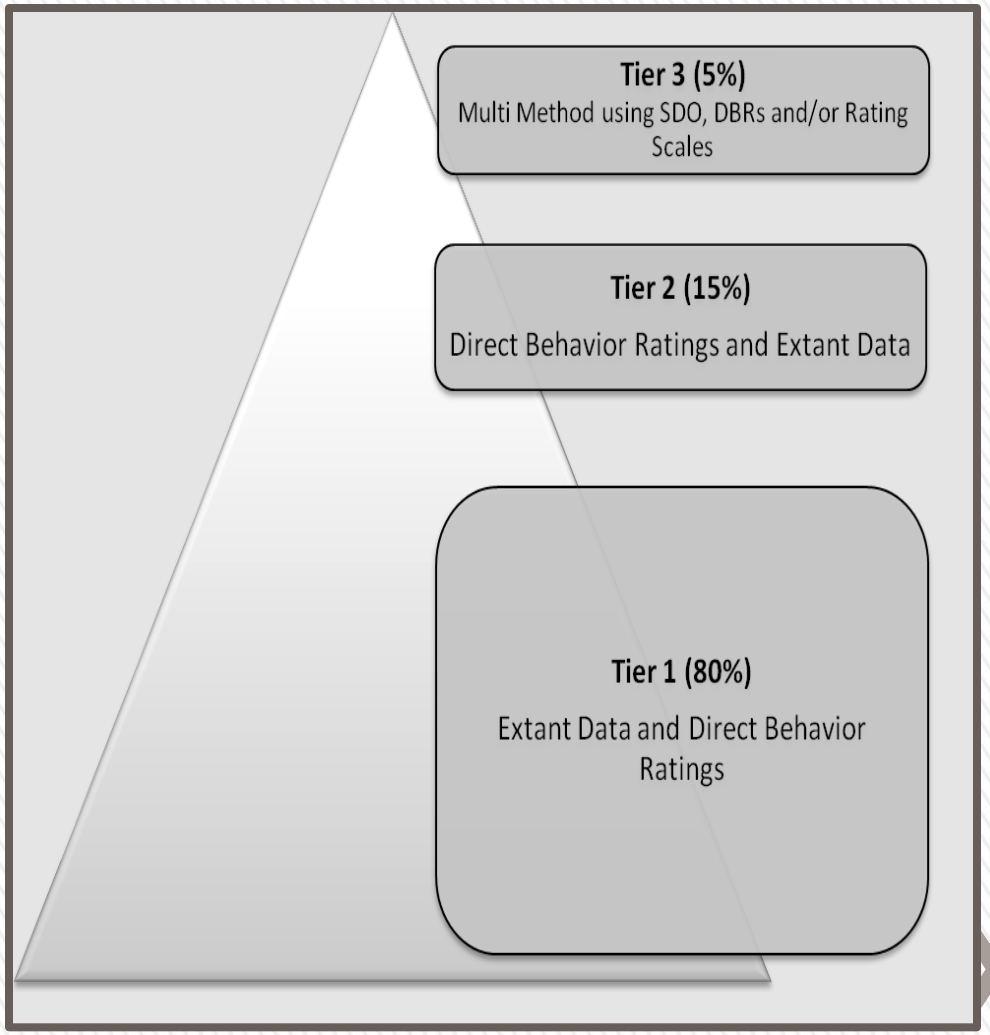
AE	RS	DB
10	10	0







Applications for DBR-SIS across Tiers for Targeted Screening and Progress Monitoring



REVIEW: Applications within Progress Monitoring

INDIVIDUAL STUDENT MONITORING OF RESPONSE: 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.

Descriptive statistics across scales and phases

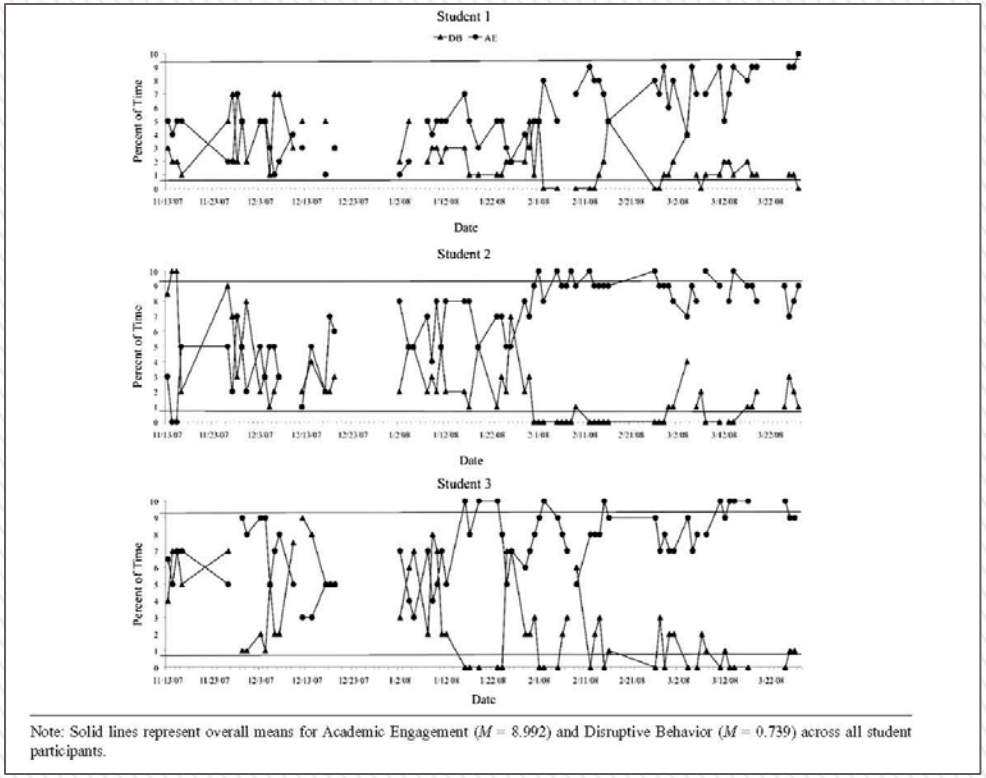
			Mean	SD
DBR-SIS	Disruptive Behavior	Baseline	4.26	1.97
		Intervention	2.58	1.41
	Academic Engagement	Baseline	4.97	2.28
		Intervention	6.82	1.50
	Compliance	Baseline	5.74	1.93
		Intervention	7.34	1.31
BOSS	On-task	Baseline	69.98	19.76
		Intervention	81.94	14.22
	Off-task	Baseline	44.82	21.01
		Intervention	28.69	18.54

INDIVIDUAL INTENSIVE STUDENT MONITORING: 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

Target Behavior	Rating Time	FALL M (SD)	SPRING M (SD)
Academic Engagement	AM	8.72 (1.31)	9.40 (0.63)
	PM	8.25 (2.03)	9.37 (0.88)
Disruptive Behavior	AM	1.30 (1.47)	0.60 (0.62)
	PM	1.61 (2.08)	0.42 (0.52)



Note: Solid lines represent overall means for Academic Engagement (M = 8.992) and Disruptive Behavior (M = 0.739) across all student participants.

CLASSWIDE MONITORING/IDENTIFICATION OF SUPPORT: Case Study Comparing Observation and DBR Data

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

Systematic Direct Observation and Direct Behavior Rating Data of Engagement

	Phase Mean			
	B1	A1	B2	A2
DBR	72	45	63	42
SDO	68	49	61	50

External Review of PM Characteristics:
National Center on Intensive Intervention

Psycometric Standards | Progress Monitoring Standards | Data-Based Individualization Standards | Usability

Tool	Scale	Reliability ⓘ	Validity ⓘ	Disaggregated Reliability and Validity Data ⓘ
Behavior Intervention Monitoring Assessment System (BIMAS)	Academic Functioning	◒	◒	◒
Behavior Intervention Monitoring Assessment System (BIMAS)	Cognitive/Attention	◒	◒	◒
Behavior Intervention Monitoring Assessment System (BIMAS)	Conduct	◒	◒	◒
Behavior Intervention Monitoring Assessment System (BIMAS)	Negative Affect	◒	◒	◒
Behavior Intervention Monitoring Assessment System (BIMAS)	Social	◒	◒	◒
Direct Behavior Rating Single Item Scales (DBR-SIS)	Academically Engaged	●	●	—
Direct Behavior Rating Single Item Scales (DBR-SIS)	Disruptive Behavior	●	●	—

Legend: ● Convincing evidence ◒ Partially convincing evidence ○ Unconvincing evidence — Data unavailable

External Review of PM Characteristics:
National Center on Intensive Intervention

Psycometric Standards | Progress Monitoring Standards | Data-Based Individualization Standards | Usability

Tool	Scale	Sensitive to Student Change ⓘ	Levels of Performance Specified ⓘ
Behavior Intervention Monitoring Assessment System (BIMAS)	Academic Functioning	○	●
Behavior Intervention Monitoring Assessment System (BIMAS)	Cognitive/Attention	○	●
Behavior Intervention Monitoring Assessment System (BIMAS)	Conduct	○	●
Behavior Intervention Monitoring Assessment System (BIMAS)	Negative Affect	○	●
Behavior Intervention Monitoring Assessment System (BIMAS)	Social	○	●
Direct Behavior Rating Single Item Scales (DBR-SIS)	Academically Engaged	●	◒
Direct Behavior Rating Single Item Scales (DBR-SIS)	Disruptive Behavior	●	◒

Legend: ● Convincing evidence ◒ Partially convincing evidence ○ Unconvincing evidence — Data unavailable

›

Summary: Applications in Progress Monitoring

- Reliable tool for progress monitoring to evaluate responsiveness to intervention for moderate behavior
- Complement to other data sources (e.g. direct observation) that allows for frequent monitoring of intensive behaviors
- Viable option for class-wide monitoring to "check in" on strategy effectiveness
- Possibilities in cross-informant monitoring – increase communication around expectations!

Applications within Targeted Screening

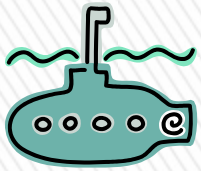
Screening Options … why "targeted" for DBR Core?

Teacher Referral	Intervention-Based Identification	Universal Screening through Normative "Rating"	Combination – Multiple Gating
• **Nomination and notification that there is a problem** • Pro: minimal resources needed • Con: not proactive – problem usually already significant (e.g. discipline referral)	• **Put intervention in place and determine responsiveness** • Pro: high accuracy in establishing significance of problem	• **Screening applied to all students** • Pro: proactive at catching potential problem • Con: can be resource-intensive (cost, collection	• **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?

DBR™ CORE

Adapted from Walker, Severson, & Seeley (2007)

Goal for Screening… Correct Identification of Students in Need



		Condition (as determined by "Gold standard")		
		Condition Positive	Condition Negative	
Test Outcome	Test Outcome Positive	**True Positive**	**False Positive** (Type I error)	Positive predictive value = Σ True Positive / Σ Test Outcome Positive
	Test Outcome Negative	**False Negative** (Type II error)	**True Negative**	Negative predictive value = Σ True Negative / Σ Test Outcome Negative
		Sensitivity = Σ True Positive / Σ Condition Positive	**Specificity** = Σ True Negative / Σ Condition Negative	

Figure Source: http://en.wikipedia.org/wiki/Sensitivity_and_specificity

Correct Identification of Students in Need… Not So Simple as Tests are Never Perfect

Goal: **Get the risk identification right for each student**!

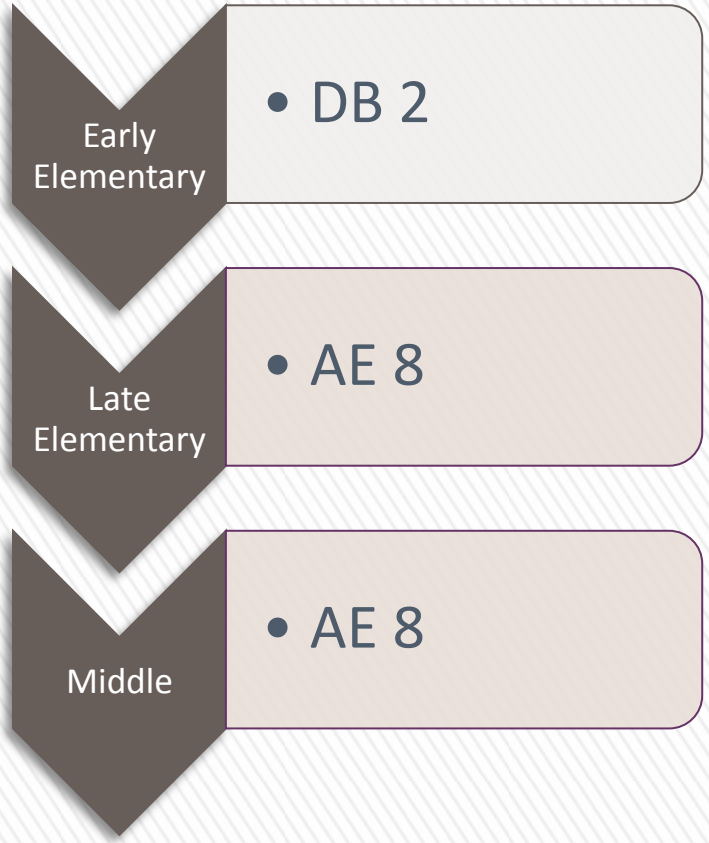
- Correctly identifying when there is risk
- Avoid missing identifying when there is risk
- Avoid over-identifying risk
- Avoid under-identifying risk

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

	Sensitivity	Specificity
Best	0.9	0.9
	0.8	.08
	0.9	0.7
	0.8	0.8
	0.8	0.7
Worst	0.7	0.7
	Smallest SN/SP discrepancy	

Preliminary Research to Identify Individual 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.



Moving from the Pilot focused on Single Scores… Screening that incorporates DBR CORE simultaneously

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.

Using 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**

Other Important Considerations in Targeted Screening Measures

- **Replication of findings** –
  - Do we see the same patterns in larger, more diverse samples?
  - Same for range of grade levels?
- **"Best" choice of targets –**
  - Individual or combined DBR-SIS targets?
- **Time-specific cut scores** –
  - Do risk scores vary across the school year and by grade?

VIABLE-II – Year 1 Data

Johnson, Miller, Chafouleas, Welsh, Riley-Tillman, & Fabiano (JSP – tentative accept)

- 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: Time point and grade can vary findings.
- Implication: What happens when you combine scores?

Lower Elementary Example

Question:
Individual Targets or Combined Score?

Answer:
Combined meets "best" decision rule

	Lower Elementary			
	AUC [95% CI]	Cut score	SN [95% CI]	SP [95% CI]
	Fall			
AE	.83 [.80, .87]	8.2	.79 [.71, .87]	.72 [.68, .75]
DB	.84 [.80, .88]	1.2	.85 [.78, .91]	.71 [.68, .75]
RS	.78 [.73, .82]	9.1	.71 [.62, .79]	.70 [.66, .74]
C	.85 [.81, .89]	26.2	**.86** [.79, .92]	**.72** [.68, .76]

VIABLE-II – Year 1 Data

Question:

Time-specific cut scores

» Do cut scores vary across the school year?

Answer:

» Yes, we do see changes over the course of the school year – changes vary by grade level group

Example

Lower Elementary			
	Cut score (Combined)	SN [95% CI]	SP [95% CI]
FALL	26.2	.86 [.79, .92]	.72 [.68, .76]
WINTER	26.4	.81 [.74, .88]	.71 [.67, .74]
SPRING	26.5	.82 [.74, .89]	.75 [.71, .78]

VIABLE-II – Year 1 Data

Question:

Replication of findings

- Do we see the same patterns in larger, more diverse samples?
- Same for range of grade levels?

Answer:

- Yes, similar patterns to prior work
- Some variation in "best" cuts across grade level groups

Lower Elementary			
	Cut sore (Combined)	SN [95% CI]	SP [95% CI]
FALL	26.2	.86 [.79, .92]	.72 [.68, .76]
WINTER	26.4	.81 [.74, .88]	.71 [.67, .74]
SPRING	26.5	.82 [.74, .89]	.75 [.71, .78]

Middle School			
FALL	27.5	.83 [.76, .90]	.71 [.66, .75]
WINTER	28.2	.90 [.83, .95]	.72 [.68, .77]
SPRING	28.1	.83 [.75, .90]	.71 [.66, .75]

Putting it all together: Blueprint for DBR Use in Systematic Screening

Blueprint Steps for Systematic Screening

1	Establish decision making plan.
2	Determine who will conduct ratings
3	Conduct rater training.
4	Determine the order in which students will be rated.
5	Select DBR-SIS target behaviors.
6	Determine when and how often ratings will occur.
7	Complete DBR-SIS ratings.
8	Calculate summary single target scores and combined scale scores (if applicable).

1 Establish decision making plan

Determine the scope of the screening, and if at-risk students will be referred for (a) additional assessment or (b) intervention (via a titration or triage approach).

Example 1: ABC Middle School decides to screen all students twice per year (fall, spring) using DBR on the three core behavioral competencies. Composite scores will be reviewed by the appropriate grade level team (blue, red, green) to determine next steps (further assessment, tiered support plan).

Example 2: XYZ Elementary School decides to use a screening process in which each teacher nominates students as potentially at risk. Those students will be screened using DBR (core behavioral competences plus one schoolwide indicator). Screening will occur 3X per year for the targeted students, with review of each competency and composite occurring by the student support team

2 Determine who will conduct ratings

Raters will likely be head teachers of the classroom in which each student spends the majority of her instructional time.

Example 1 – ABC Middle: It was decided that the Reading/Language Arts teachers would complete the assessments, with confirmation of findings (and second rater) discussed at the team meeting.

Example 2 – XYZ Elementary : The primary classroom teacher was determined as the most appropriate rater.

3 Conduct rater training

Raters should be directed to complete DBR-SIS training.

Example 1 – ABC Middle : Reading/Language Arts teachers used a planning session to independently complete the online training module. A portion of the fall professional development day was set aside with the school psychologist to problem-solve questions and set up rating materials.

Example 2 – XYZ Elementary: The school principal allocated half of the first professional development day to first review of behavior support systems and expectations in the school, and then rotate teachers through the computer lab to complete the online training module. The lab was staffed by the school psychologist and counselor for further questions.

5 Select DBR-SIS target behaviors

Include all single targets and combination scales that are pertinent to relevant cut scores, as well as school context. Determine the targets/scales on which students should be at-risk to be considered for additional assessment or intervention (see Step 1).

Example 1 – ABC Middle : As reviewed in step one, the three core behavioral competencies were selected as targets for all students, with use of the composite score to determine risk.

Example 2 – XYZ Elementary: As reviewed, the three core behavioral competencies plus "be responsible" were selected for initial teacher nomination . Targeted screening using DBR then occurred, with evaluation using the single targets for consideration.

Different Approaches

***ABC MIDDLE*: If a student's <u>combined</u> summary score is equal to or less than this value, the student is considered at-risk.**

		Note. Conditional probability statistics are presented alongside a [95% confidence interval]			
Time Point	**Cut Score**	Sensitivity	Specificity	PPV	NPV
Fall	**27.5**	.83 [.76, .90]	.71 [.66, .75]	.41 [.37, .45]	.95 [.92, .97]
Spring	**28.1**	.83 [.75, .90]	.71 [.66, .75]	.41 [.37, .45]	.94 [.92, .97]

***XYZ LOWER ELEMENTARY*: If a student's summary score for <u>Academically Engaged</u> Behavior is equal to or less than this value, the student is considered at-risk.**

		Note. Conditional probability statistics are presented alongside a [95% confidence interval]			
Time Point	**Cut Score**	Sensitivity	Specificity	PPV	NPV
Fall	**8.2**	.79 [.71, .87]	.72 [.68, .75]	.38 [.34, .42]	.94 [.92, .96]
Winter	**8.4**	.88 [.81, .94]	.70 [.66, .74]	.40 [.37, .44]	.96 [.94, .98]
Spring	**8.5**	.85 [.78, .92]	.74 [.70, .77]	.39 [.35, .43]	.96 [.94, .98]

6 Determine when and how often ratings will occur

Identify the days (e.g., October 1-5) and times (e.g., 9:00am-12:00pm and 12:30-3:30pm) during which each group of students will be observed and rated. An attempt should be made to schedule 10 ratings for each student within each group.

Example 1 – ABC Middle : Language Arts and Reading blocks, averaging 6 times per week at varying days and times given scheduling.

Example 2 – XYZ Elementary: Morning (school start to lunch) and afternoon (post-lunch to bus time) each day, providing up to 10 opportunities per week.

7 Complete DBR-SIS ratings

Teachers should complete DBR-SIS ratings as soon as possible following each rating period.

Example 1 – ABC Middle : Done at end of block over transition, with decision to skip rating if not completed by end of school.

Example 2 – XYZ Elementary: Done, with decision to skip rating completion if not done before moving to the next rating period (e.g. morning ratings done before end of lunch period).

8 Calculate summary single target scores and combined scale scores (if applicable).

For single target scores, compute the mean of scores within each DBR-SIS target (e.g., mean of all AE ratings). For combined scale scores, compute the mean within each DBR-SIS target, remembering to reverse-score all DB scores. Sum the means of each target to derive the DBR-SIS combined scale summary score. It is recommended that means comprised of less than 6 ratings are not used.

Example 1 – ABC Middle : Reminder, based on composite.

Example 2 – XYZ Elementary. Reminder, based on individual target.

9 Compare resulting summary target/scale scores to their corresponding cut scores.

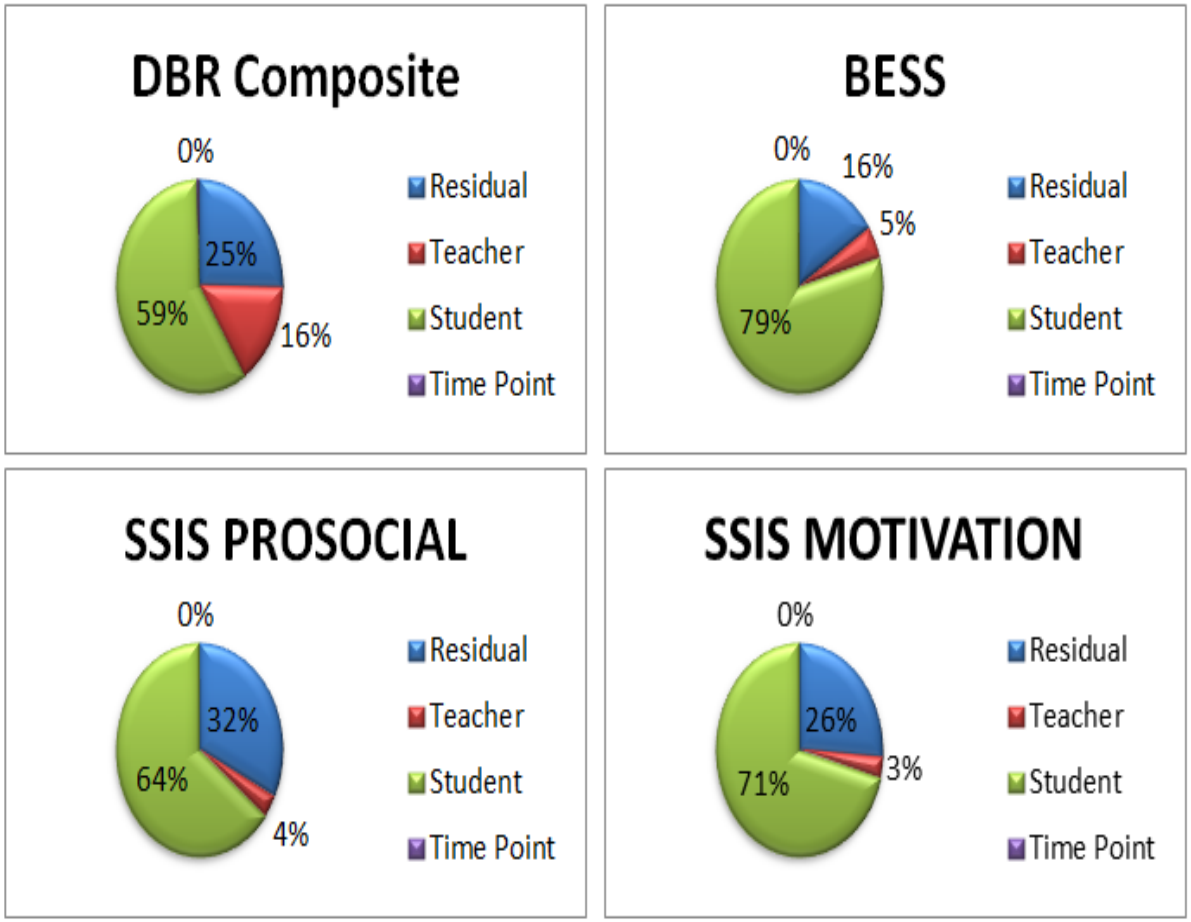
Ensure identified cut scores are appropriate for the target/scale under consideration, as well as the grades and time of year within which DBR-SIS was administered. Use cut scores to generate a list of at-risk students to refer for additional assessment or intervention.

Example for ABC Middle. Note XYZ would have additional columns for each target.

Student Name	Combined Score	Cut Score	At-risk	Action Taken
			□ Yes □ No	

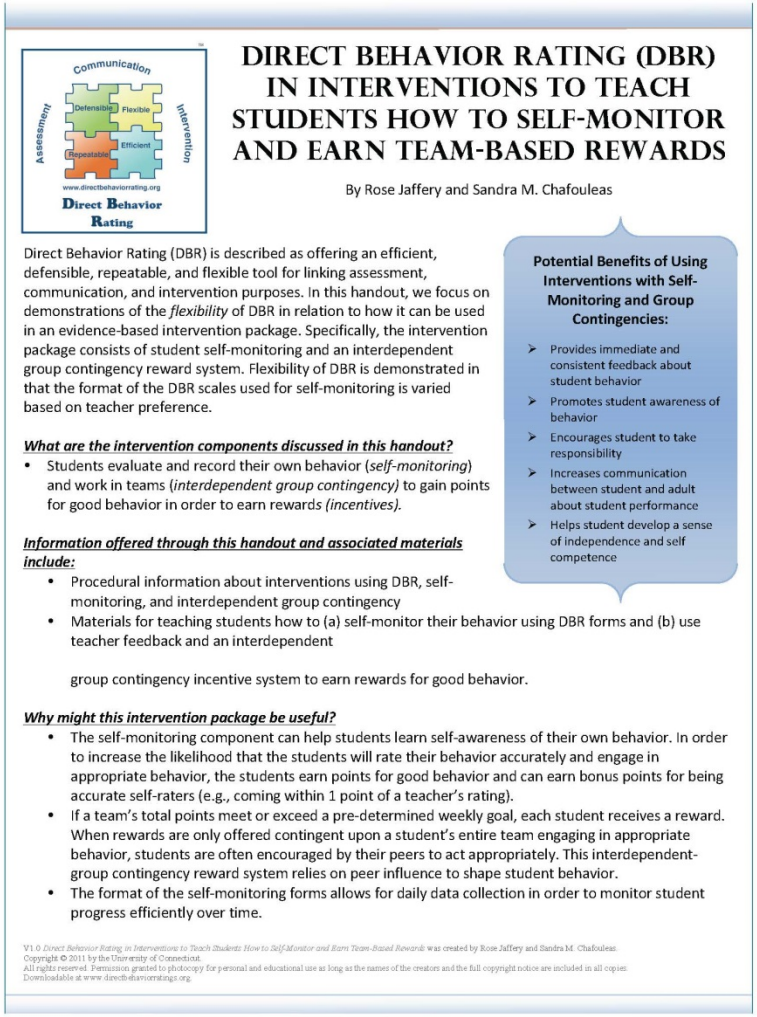
What's next in DBR research? Coming Soon…

Behavior Screening – How Often?



- Examining the variance in scores attributable to time point
- Examining changes in risk-status across the school year

Who Rates? - Students as Monitors of Responsiveness



DIRECT BEHAVIOR RATING (DBR) IN INTERVENTIONS TO TEACH STUDENTS HOW TO SELF-MONITOR AND EARN TEAM-BASED REWARDS

By Rose Jaffery and Sandra M. Chafouleas

Direct Behavior Rating (DBR) is described as offering an efficient, defensible, repeatable, and flexible tool for linking assessment, communication, and intervention purposes. In this handout, we focus on demonstrations of the *flexibility* of DBR in relation to how it can be used in an evidence-based intervention package. Specifically, the intervention package consists of student self-monitoring and an interdependent group contingency reward system. Flexibility of DBR is demonstrated in that the format of the DBR scales used for self-monitoring is varied based on teacher preference.

Potential Benefits of Using Interventions with Self-Monitoring and Group Contingencies:

- Provides immediate and consistent feedback about student behavior
- Promotes student awareness of behavior
- Encourages student to take responsibility
- Increases communication between student and adult about student performance
- Helps student develop a sense of independence and self competence

What are the intervention components discussed in this handout?

- Students evaluate and record their own behavior (*self-monitoring*) and work in teams (*interdependent group contingency)* to gain points for good behavior in order to earn rewards *(incentives).*

Information offered through this handout and associated materials include:

- Procedural information about interventions using DBR, self-monitoring, and interdependent group contingency
- Materials for teaching students how to (a) self-monitor their behavior using DBR forms and (b) use teacher feedback and an interdependent

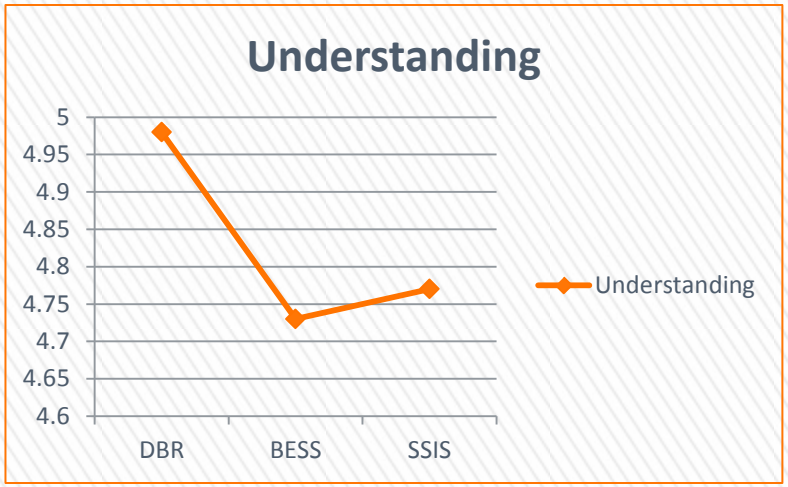
  group contingency incentive system to earn rewards for good behavior.

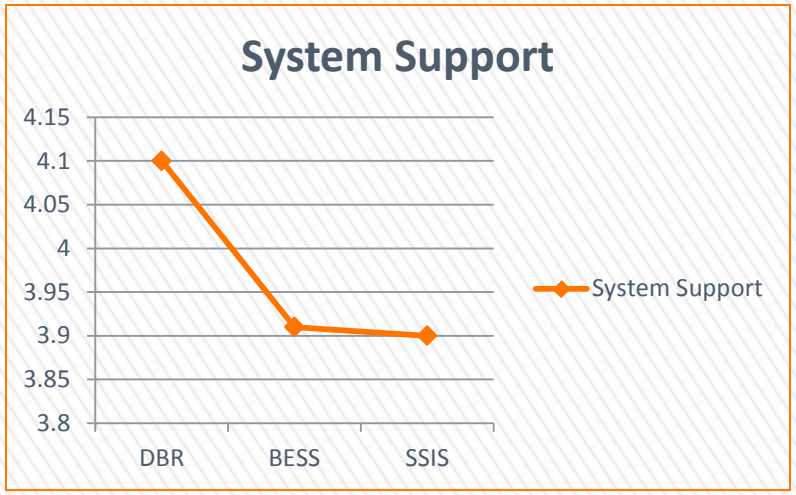
Why might this intervention package be useful?

- The self-monitoring component can help students learn self-awareness of their own behavior. In order to increase the likelihood that the students will rate their behavior accurately and engage in appropriate behavior, the students earn points for good behavior and can earn bonus points for being accurate self-raters (e.g., coming within 1 point of a teacher's rating).
- If a team's total points meet or exceed a pre-determined weekly goal, each student receives a reward. When rewards are only offered contingent upon a student's entire team engaging in appropriate behavior, students are often encouraged by their peers to act appropriately. This interdependent-group contingency reward system relies on peer influence to shape student behavior.
- The format of the self-monitoring forms allows for daily data collection in order to monitor student progress efficiently over time.

- Comparison of teacher ratings, student ratings, and external observations
- Examine traits (AE, DB, RS) and methods (Teacher DBR, Student DBR, Teacher rating scale, Student rating scale, and SDO)

Is it Usable? - Teacher Perceptions of Student Behavior & Behavior Assessments

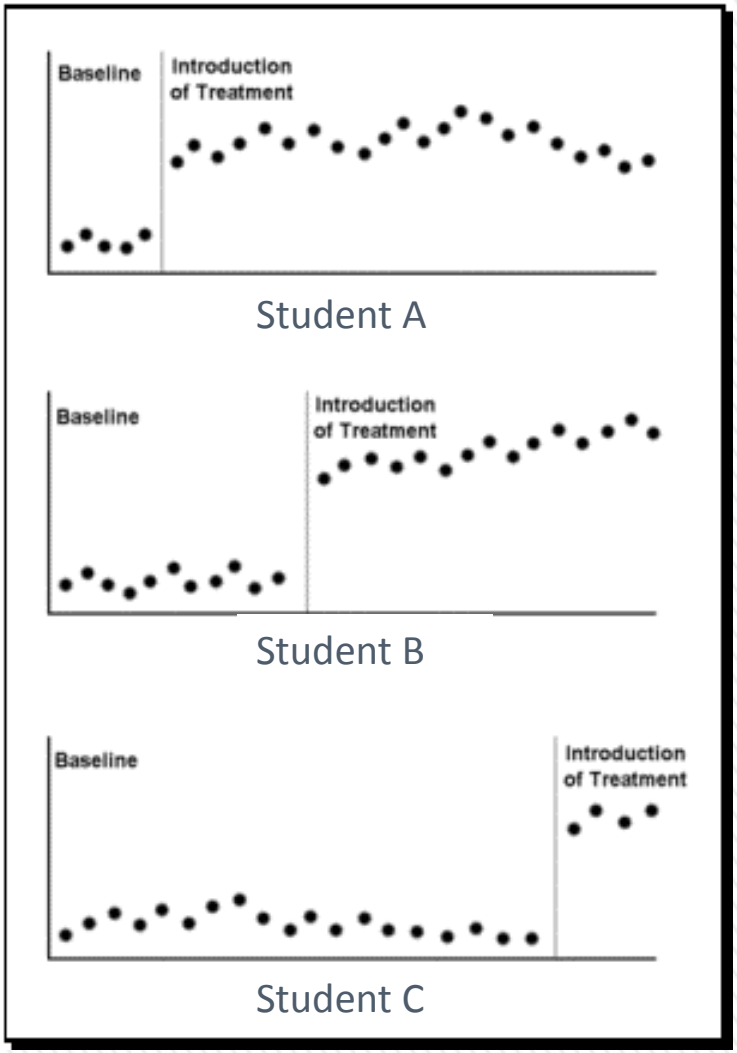




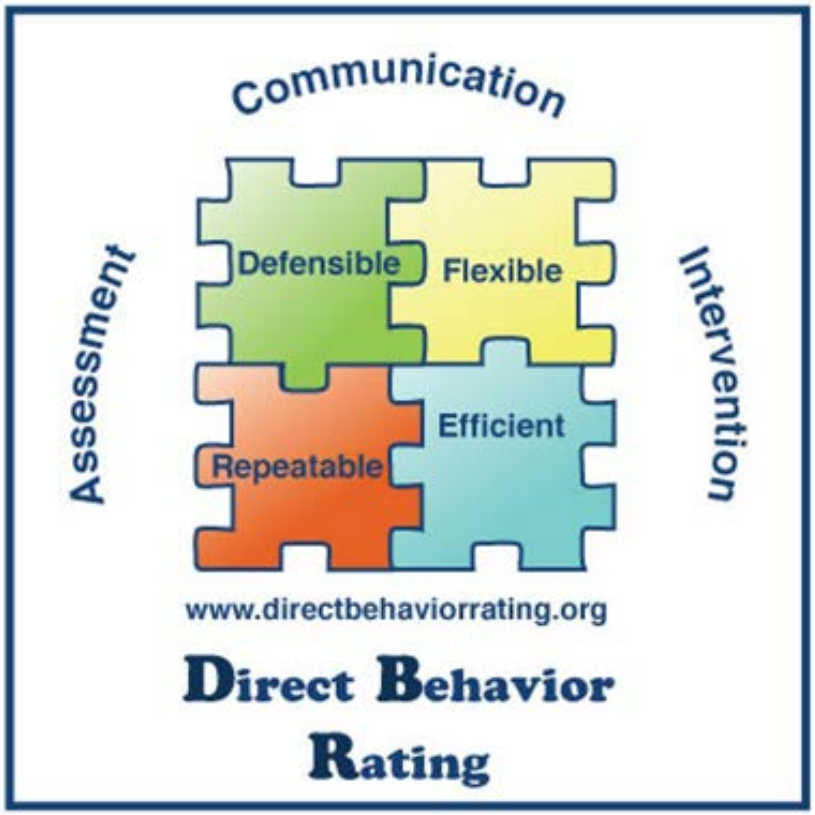
Note: Higher System Support Scores reflect a perception to implement with greater independence

- Examining how teachers assign ratings using DBR
  - Why a rating of 8 vs 7?
  - What dimensions of behavior are reflected in the rating?
- Examining teacher perceptions of usability
  - Identify strengths/weaknesses/ barriers

Continued Exploration of DBR Applications in Progress Monitoring



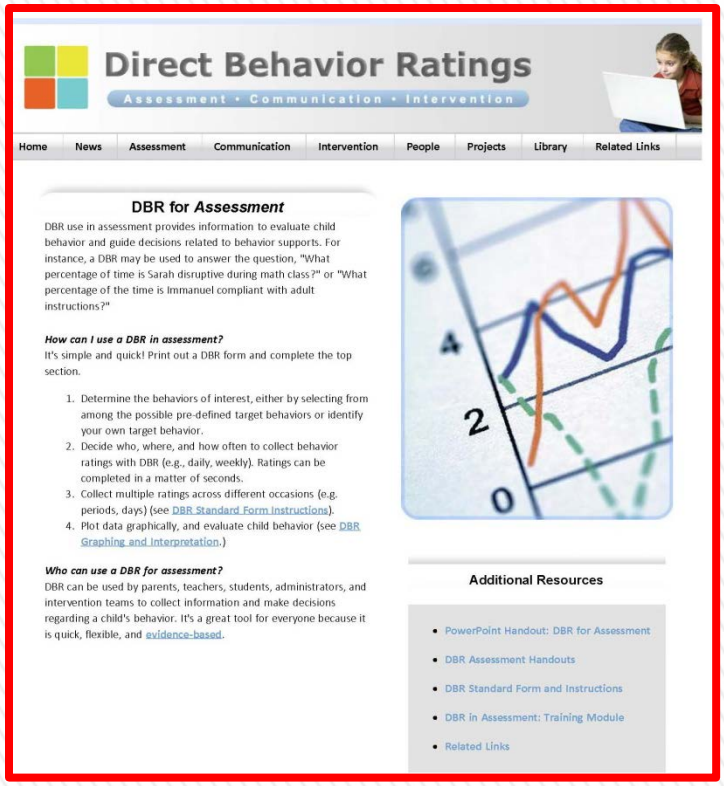
- Examining DBR as a progress monitoring tool
  - Is it sensitive to change for students with mild-moderate behavioral challenges?
- Further evaluate DBR relative to SDO
  - Implications for decision-making
- Investigate use and influences on problem-solving behavior



» What are the possibilities across assessment, communication, intervention?

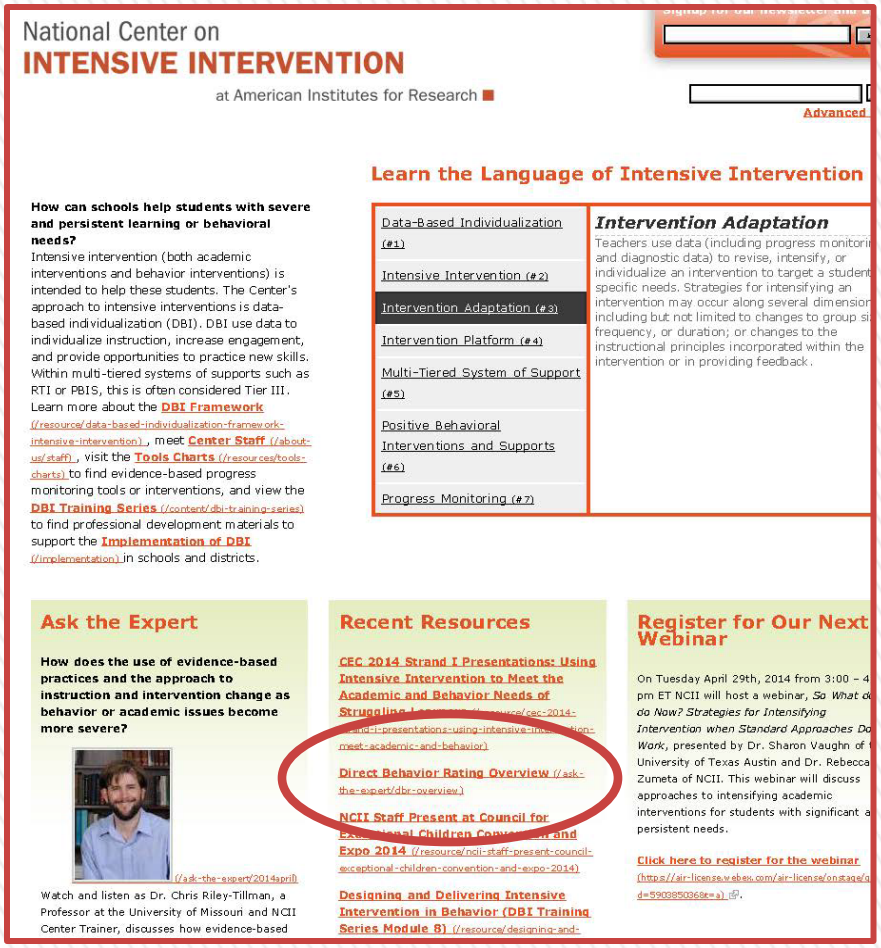
Closing Considerations…

www.directbehaviorratings.org

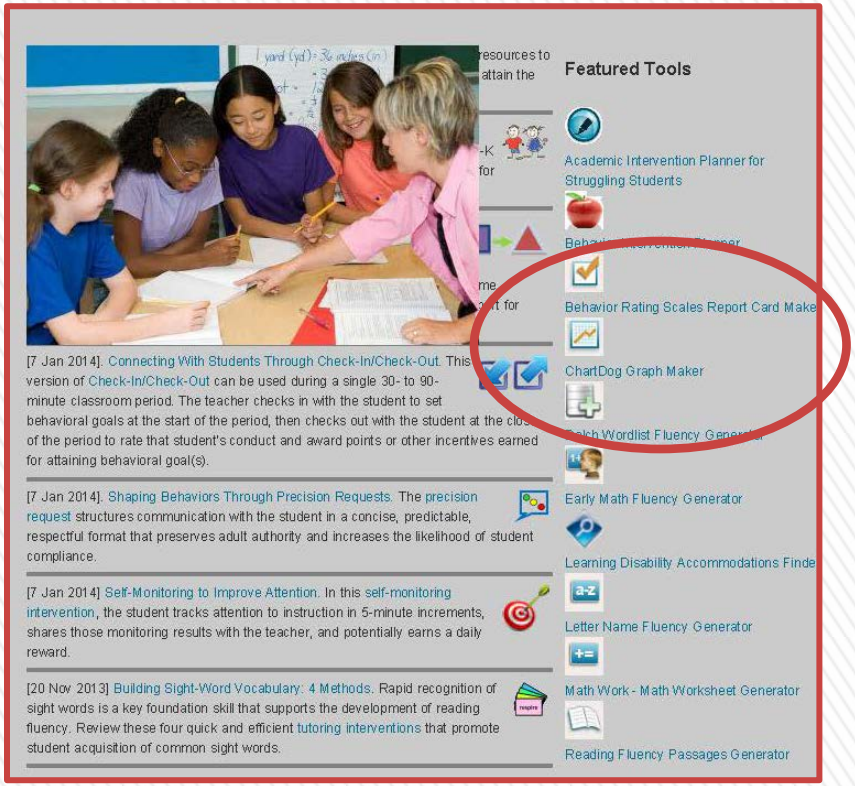


Other Resources

www.intensiveintervention.org



www.interventioncentral.org



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Questions, comments, and thanks….