

DBR Connect[™]:Using Technology to Facilitate Behavior Screening and Progress Monitoring

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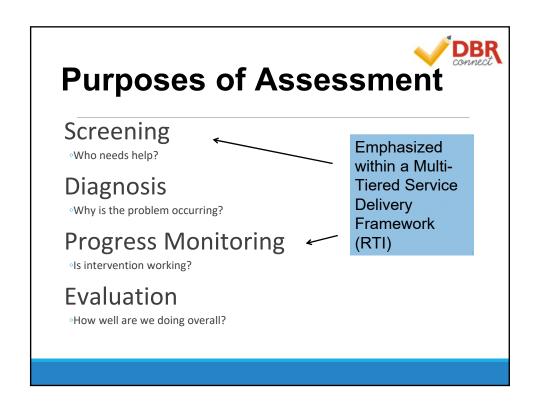
November 11, 2016 - Presentation at NYASP

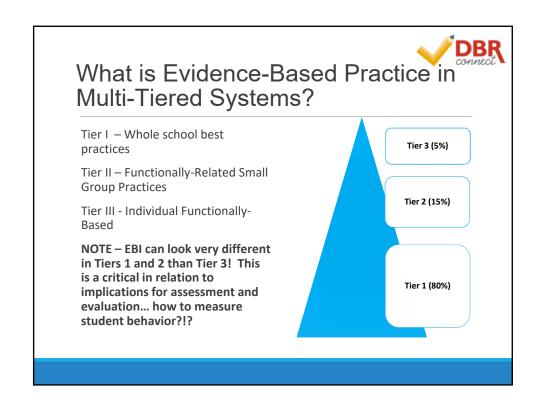
*Disclosure: Dr. Chafouleas is an author of DBRConnect and receives royalty payments.



Learning Objectives

- Participants will increase knowledge about the evidence supporting the use of Direct Behavior Ratings in school-based assessment practices involving screening and progress monitoring.
- Participants will learn the benefits to electronic data systems
 that facilitate decisions about behavior supports, with focus on
 how to use the DBR Connect system to collect, store, interpret,
 and communicate information with regard to an individual or
 group of students.
- Participants will gain skill in how to use DBR Connect in their multi-tiered assessment frameworks, including use in combination with other assessment practices.





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)



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



Behavior Rating Scales

Definition:

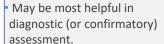
- Tools that require an individual to rate the behavior of another based on past observation of that person's behaviors (Kratochwill, Sheridan, Carlson, & Lasecki, 1999).
- Could be broad-based (comprehensive) or narrow (overall screener or construct-restricted)

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



- 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.



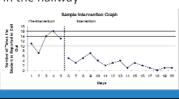
Systematic Direct Observation

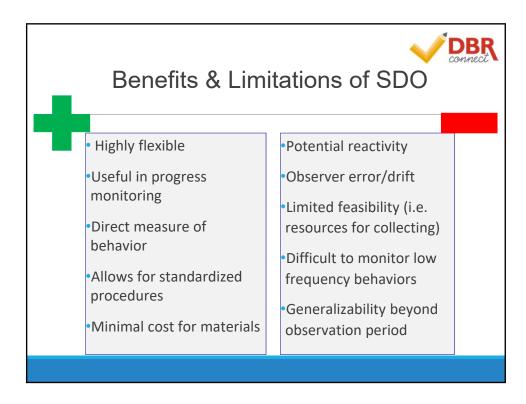
Definition:

 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"





The Contemporary Dilemma for Educators



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

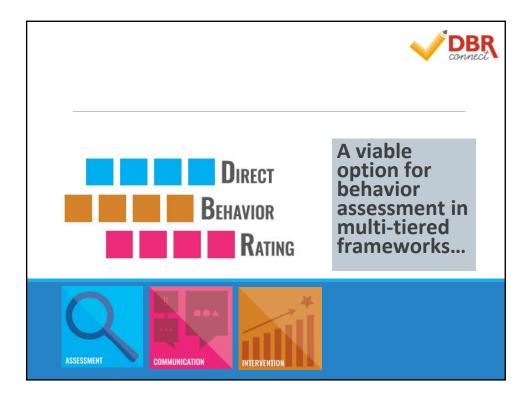


Current methods of behavior assessment were not built for multi-tiered assessment

New options must possess four desirable characteristics...

Defensible Efficient Flexible Repeatable Features

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





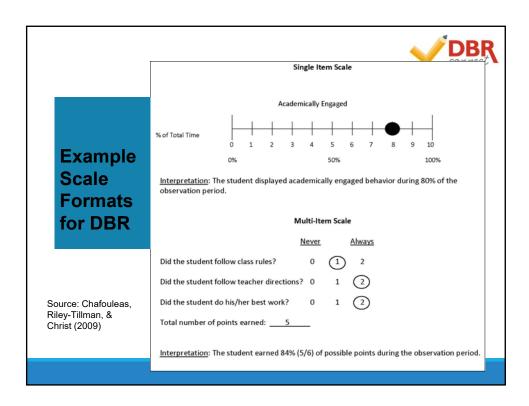
Direct Behavior Rating

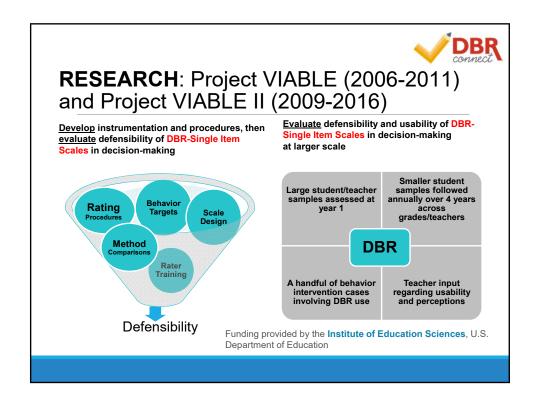
Definition:

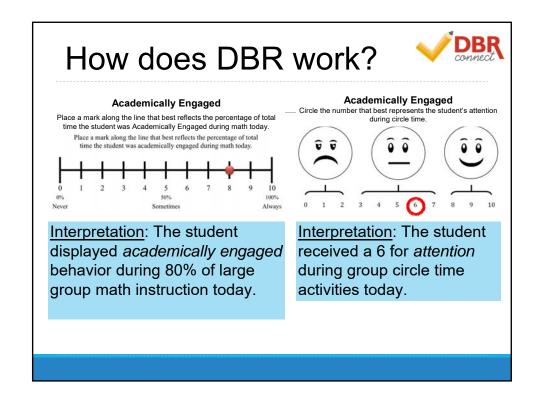
 A tool that involves a <u>brief rating</u> of a target behavior following a specified observation period (e.g. class activity) by those persons who are <u>naturally</u> occurring in the <u>context</u> of interest

Examples:

- Behavior Report Card
- Home-School Note
- Daily Progress Report
- Good Behavior Note
- · Check-In Check-Out Card









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?



DBR

- 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	ı	2	3	4	5	6	7	8	9	10
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%.

Let's Practice...

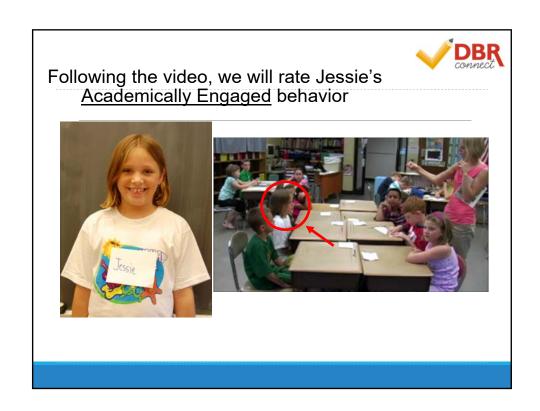


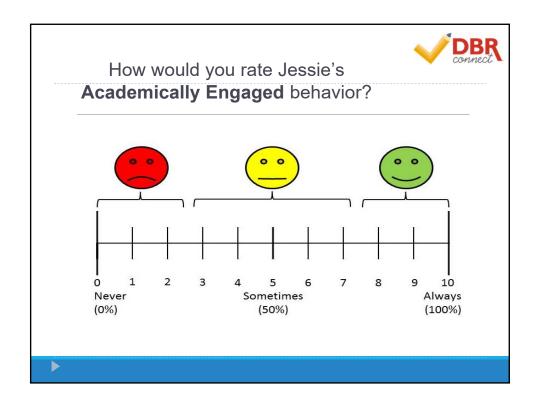
Academically Engaged:

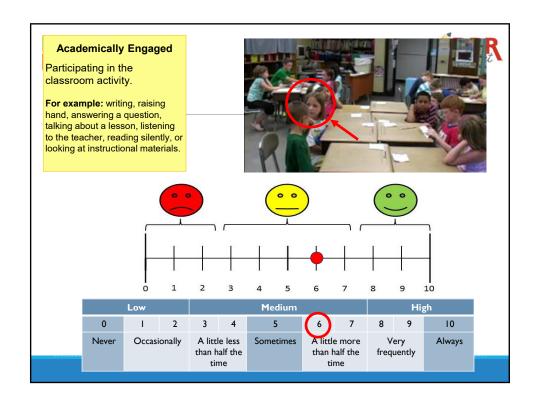
Participating in the classroom activity.

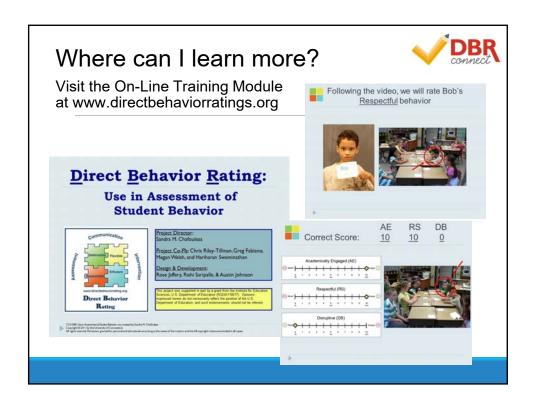
Examples: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials.













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)

<u>Sample</u>: 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.

<u>Measures</u>: 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.

			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 STUDENT MONITORING: Intensive Behavior



0.40 (0.62)

Kindergarten Example

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

<u>Sample</u>: full day K inclusive classroom, 2 teachers and 22 students

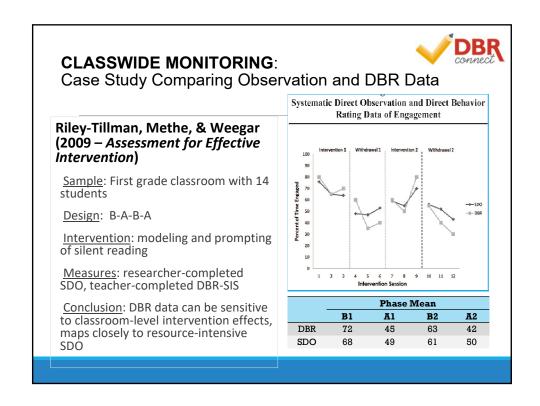
<u>Measures</u>: teacher-completed DBR-SIS following am and pm over Nov-March for ALL students

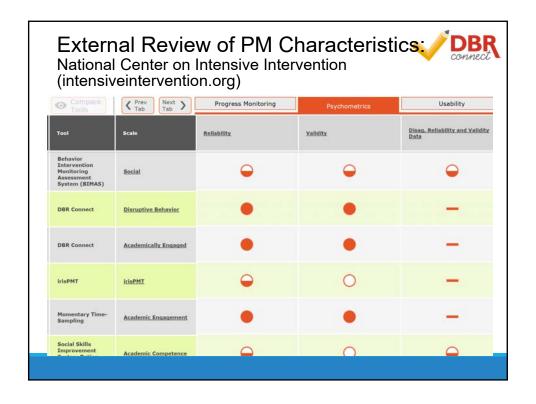
Conclusion: "Local" cut-score comparisons can be useful in examining individual student performance. Periodic re-assessment of all may be needed to re-confirm appropriate comparison

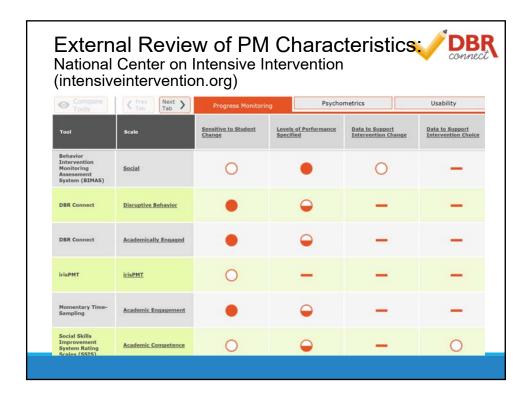
Academic	AIVI	8.12 (1.31)	9.40 (0.63)	
Engagement	PM	8.25 (2.03)	9.37 (0.88)	
Disruptive	AM	1.30 (1.47)	0.60 (0.62)	
Behavior	PM	1.61 (2.08)	0.42 (0.52)	
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Summary: DBR-SIS Applications in PM



- 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 connect

DBR-SIS: Applications within Targeted Screening

Remember: Goal is Identifying Risk BUT Tests are Never Perfect

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 8.0 .08 0.9 0.7 8.0 8.0 8.0 0.7 0.7 0.7 Worst Smallest SN/SP discrepancy

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.

Early Elementary

Late AE 8

• AE 8

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.

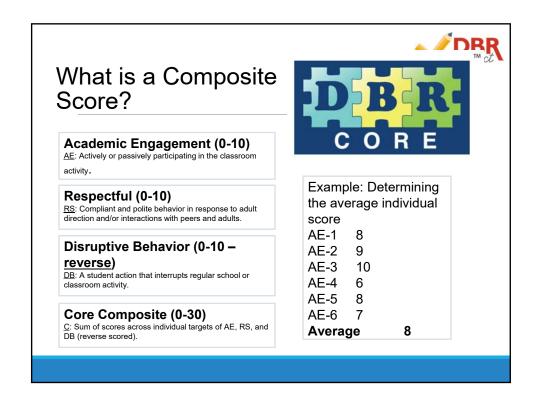
Respectful:

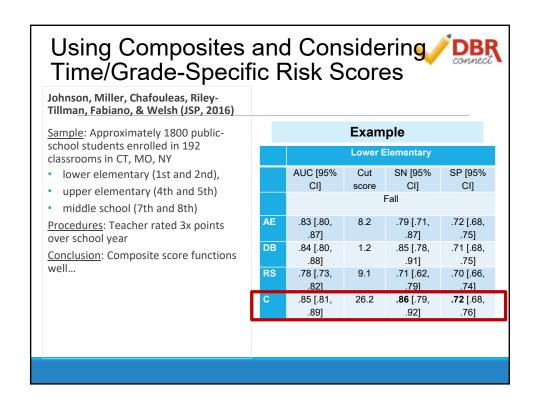
Compliant and polite behavior in response to adult direction and/or interactions with peers and adults.

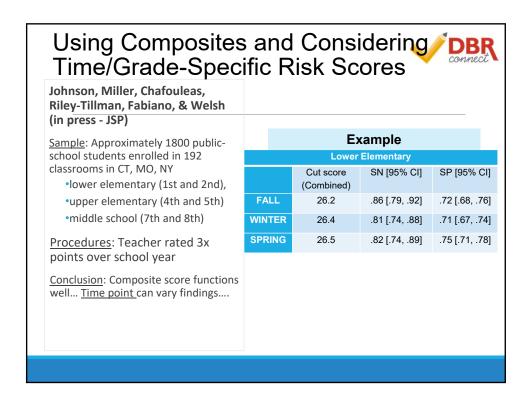
Disruptive Behavior:

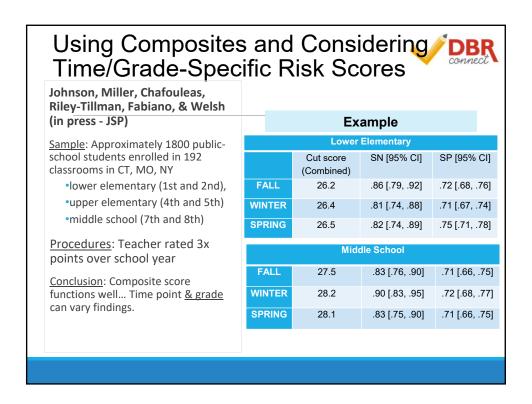
A student action that interrupts regular school or classroom activity.











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

Respectful No of total time 0 1 2 3 4 5 6 7 8 9 10 Nover * Remember that a lower zore for "Disruptive" is more destrable. PURS *-16204 N. Florida Ave. *- Lutz, Fl. 33549 *- 1,800,331,8378 *- www.parlinc.com Couyling 0.2015 by PARA. All rights beauted.



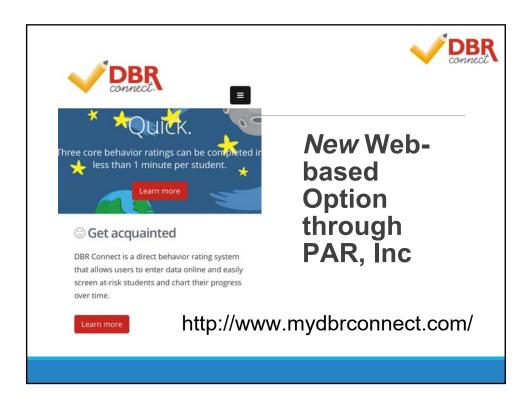
Development of DBR Connect™

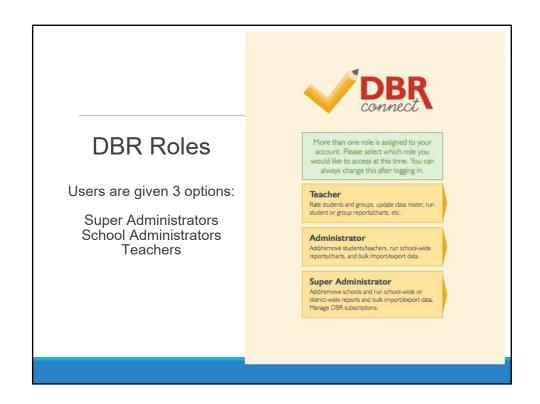
Original Website: Information and Training



directbehaviorratings.org









Super Admin Account

Key Functionality

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



Pricing Structure Based on # of Students

Pricing and contract term (circle one):

Student Population	Full Year	Mid Year
1-99	\$400	\$240
100-499	\$600	\$360
500-1,499	\$1,000	\$600
1,500-2,999	\$1,500	\$900
3,000-9,999	\$1,800	\$1,080
10,000-49,999	\$5,000	\$3,000
50,000-99,999	\$11,000	\$6,600
100,000-299,999	\$14,000	\$8,400
300,000+	\$20,000	\$12,000

Basically, a few dollars per student annually

DBR connect



School Admin Account

Key functionality

- Adding teachers
- Adding students
- Managing school-wide behaviors
- Exporting school-wide data





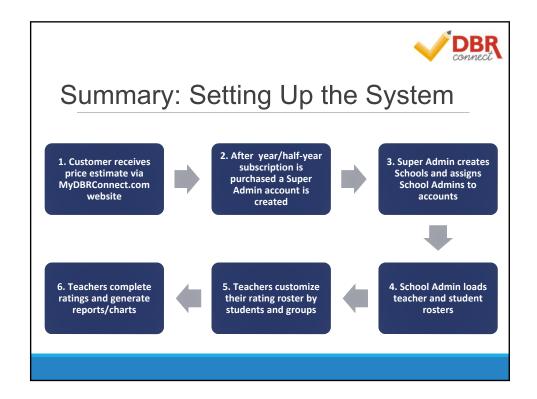
Teacher Account

Key functionality

- Rating individuals
- Scheduling ratings
- Defining new behaviors
- Documenting changes in supports (interventions)
- Creating and rating groups of students
- Generating charts
- Generating reports



DBR

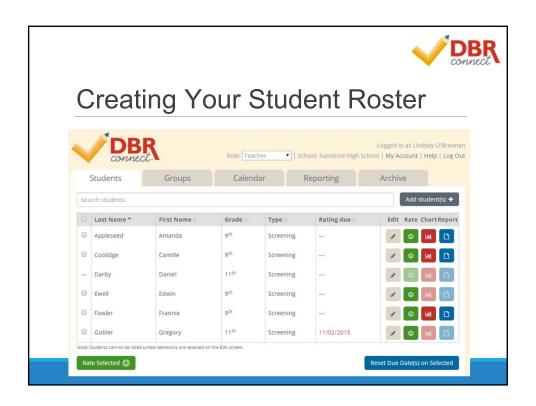


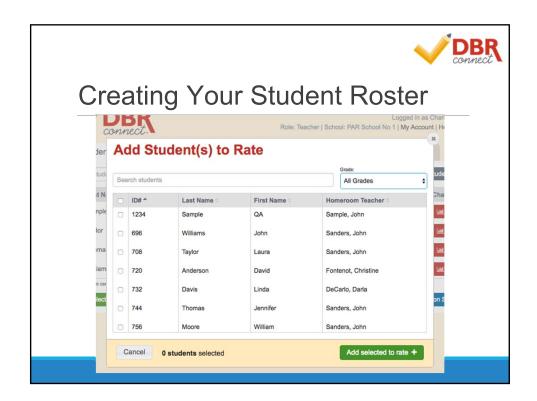
Summary: DBR Connect Key Features

- 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





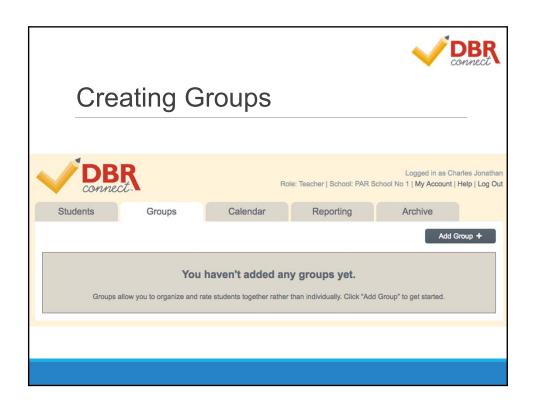
Individual Student Ratings vs. Group Ratings

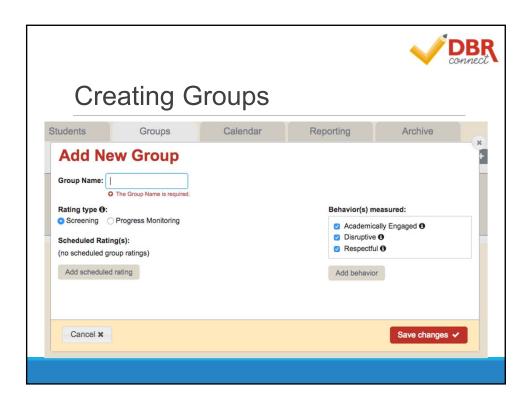
Individual Student Ratings

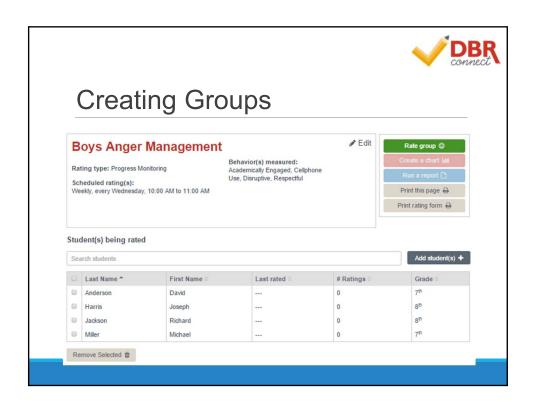
- Ideal for screening or progress monitoring one particular student's behavior.
- This is often the case for students with Individualized Education Plans (IEPs) or Behavior Intervention Plans (BIPs).
- The teacher sets up a daily and weekly rating schedule to monitor the student's behavior before, during,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

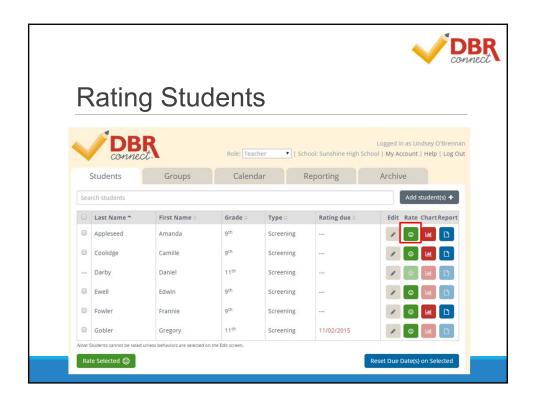
•Group Ratings

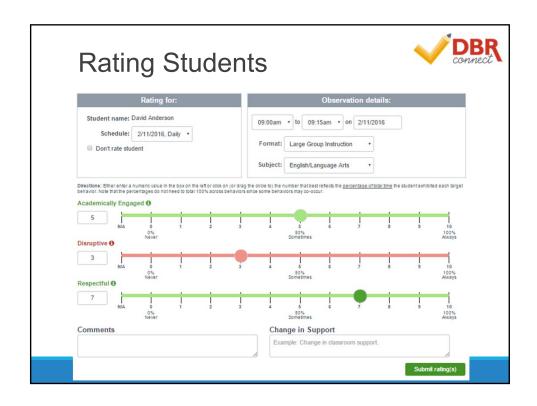
- Rate multiple students at once.
- Allows teacher to "control" for the common environmental factors (time of day, activity, and subject).
- Can compare students to each other. For example, the teacher can examine
 if the whole class is displaying high levels of problem behavior or just one
 student.

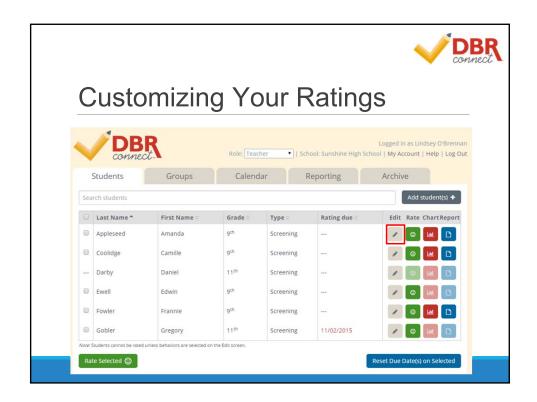


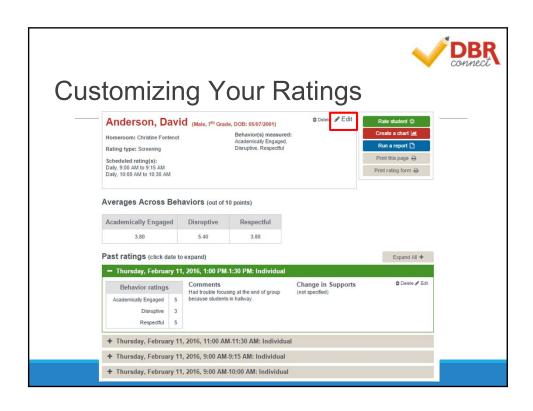


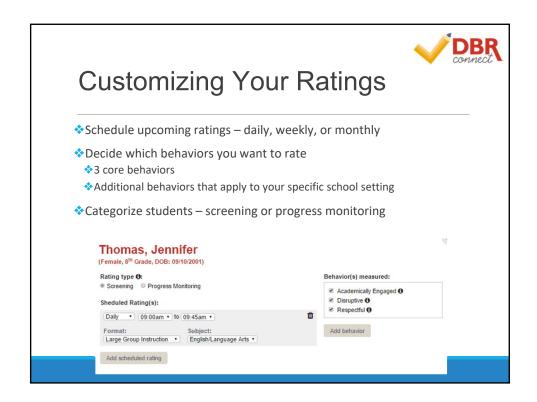


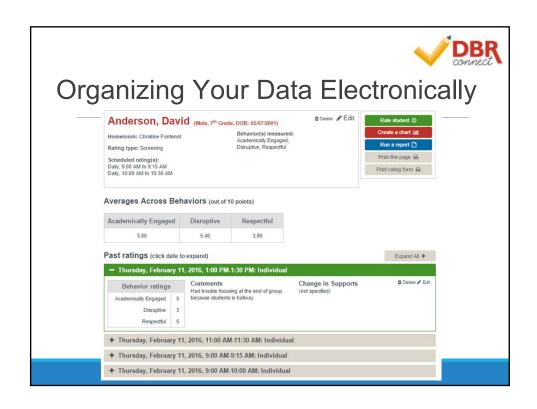


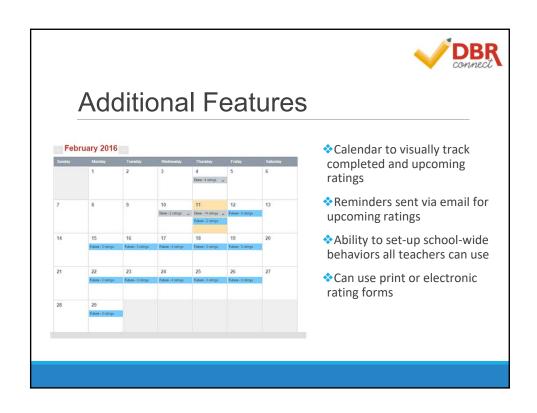














DBR Connect™ Report Options

Reports: Background Information



Individual Screening Report
Sandra M. Chafouleas, PhD, and T. Chris Riley-Tillman, PhD



Student Information

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

Report Details

Date of Report: June 23, 2015 Rating Period: April 6 – June 1, 2015 Student ID: 12345 School: Greenville Elementary Homeroom Teacher: Marjorie Murphy Grade: 1st grade

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

Overview of DBR Connect

Des 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.



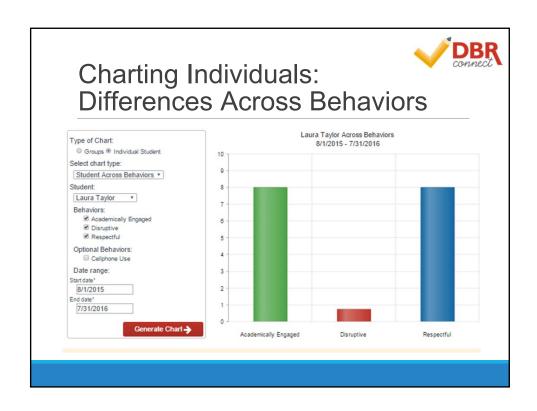
Respectful (RS) is defined as compliant and polite behavior in response to adult direction or interactions with peers and adults. Respectful behavior can include following teacher direction, prosocial interaction with peers, positive response to adult request, or verbal or physical disruption without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

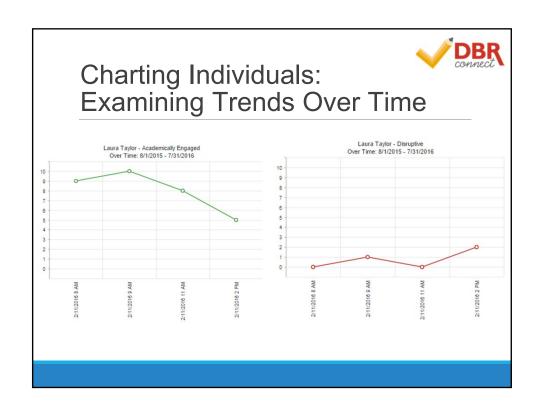


Reporting Data

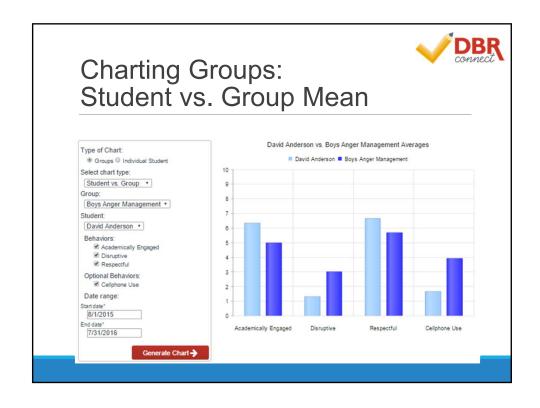
Three Options:

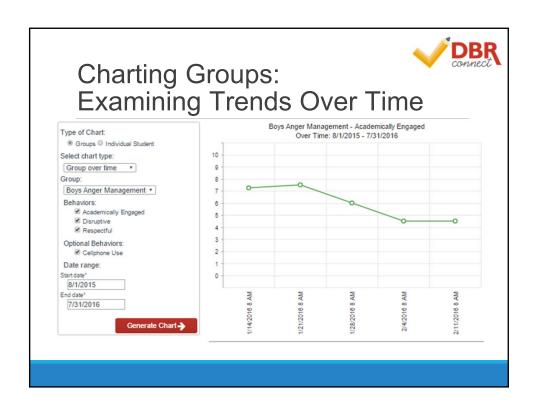
- 1. Individual Screening Report
- 2. Individual Progress Monitoring Report
- 3. Group Screening Report













Using DBR Connect as a Targeted 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.



Screening Report Snapshot

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.





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

	Mean Behavior Ratin			
Academically Engaged	Disruptive	Respectful	Composite Score*	Risk Level
3.8	5.7	4.0	12.1	At risk

DBR 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 Screening 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 Reports: (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. Guide Intervention Common reasons for academic problems Academic interventions The academic activity is too hard Academic acquisition interventions Academic proficiency (accuracy) Student has not had enough help to do it Academic proficiency (speed) interventions Student has not spent enough time doing it Student has demonstrated the skill before but has difficulty applying the skill in a new Academic generalization interventions setting Common reasons for behavior problems Behavioral interventions Student has not learned the behavior Behavioral acquisition interventions Student is trying to get something (e.g., Behavioral proficiency interventions Student is trying to escape something (e.g., Behavioral proficiency interventions an academic task demand) Student does not want to do it Student has demonstrated the behavior before but has difficulty displaying the Behavioral generalization interventions behavior in this setting Majority of the students are misbehaving in Class-wide behavioral interventions Class-wide behavioral interventions Citation: Daly, E.J., III, Witt, J.C., Martens, B.K., & Dool, E.J. (1997). A model for conducting a functional analysis of

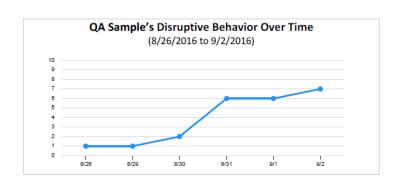


Using DBR Connect as Progress Monitoring Tool

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







DBR Connect™ Summary

