Using data for decision making for academic and social behavior

Content Strand: Linking to Academic Systems

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PRESENTATION FOR THE NORTHEAST PBIS LEADERSHIP FORUM - MAY 18, 2012



OUR BACKGROUND

CHAFOULEAS

- Training
 - School psychology and administration
- Urban and rural schoolbased practitioner
 - Pre-referral intervention teams, augmentative communication, district crisis team, parent educator, alternative settings for behavior
- Research to get my degree
 - Early literacy assessment
- Current research
 - Behavior assessment research

MILLER

- Training
 - School psychology
- Extensive and diverse schoolbased experiences
 - Pre-referral intervention teams, eligibility determination teams, IEP teams, school-based behavioral assessment and intervention
- Research to get my degree
 - Function-based behavioral interventions for students diagnosed with ADHD
- Current research
 - Behavioral assessment and intervention research

PURPOSE

- To review the importance of "data" in making good decisions about the effectiveness of any support.
- To explore issues surrounding the who, what, where, when, and why toward facilitating cohesive systems across support types and tiers.
- To provide practical examples of such data systems, along with examples from research.
- To facilitate discussion among participants regarding data systems.

A QUOTE...

"The implicit and explicit assumption is that if these data exist, improvement will soon be evident. It reminds me of the old quip about the American who goes to France and speaks English louder. Here are the data... Improve." (Goren, 2012, p. 233)

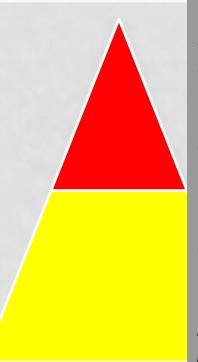
WHY DO WE NEED DATA?

TO BEGIN, ASSUMPTIONS...

Data are critical to...

- Make accurate decisions about the effectiveness of instruction/interventions;
- Undertake early identification of academic and behavioral problems;
- Prevent unnecessary and excessive identification of students with disabilities;
- Determine individual education programs and deliver and evaluate special education services

Source: NASDSE blueprint on RTI implementation (school level)



"Smart RTI" involves databased individuation...

- Set ambitious goals
- Begin with validated program implement with greater intensity
- Collect progress monitoring data weekly with a tool that has demonstrated treatment validity
- When progress is inadequate, adapt the program

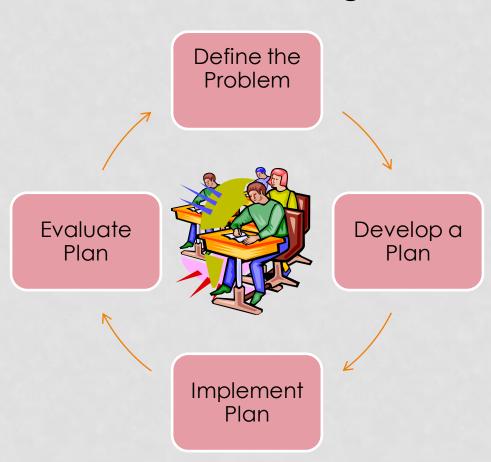
Source: Fuchs & Compton – Exceptional Children (2012)

WHAT IS "RESPONSE TO INTERVENTION"?

BASIC QUESTION: How do we know if X is working?

- Foundations within databased decision making
- Data-based decision making has roots in the problem-solving model
- Initial focus on the individual "case" but now applied to multi-tiered frameworks ("all cases")

(Bergan, 1977, Bergan&Kratochwill, 1990; Tilly, 2009; Reschly& Bergstrom, 2009)



SCHOOL-BASED ASSESSMENT AND RTI: THE PROBLEM FOR YOU

RTI means service accountability for all = MORE cases with same resources

The traditional assessment and intervention orientation is <u>not</u> feasible or flexible for a multi-tiered framework

Solution?

- Quickly design interventions at all tiers
- Collect relevant formative data in a highly feasible manner
- Include a consistent way to analyze data that is quick and easy for anyone to do

PURPOSES OF ASSESSMENT

Screening

- Who needs help?
 - Efficient, quick "temperature-taking"

Diagnosis

- Why is the problem occurring?
 - Detailed, comprehensive profiles

Progress Monitoring

- Is intervention working?
 - Formative, on-going streams of data

Evaluation

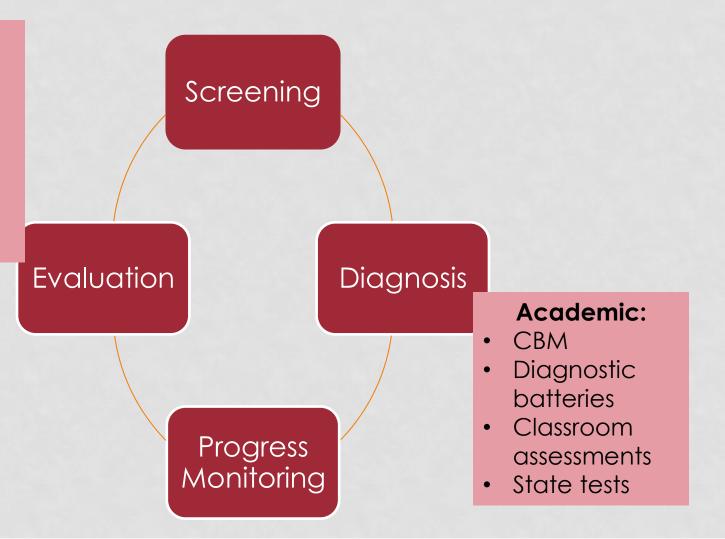
- How well are we doing overall?
 - Summative sampling of performance

Emphasized by the National Center on Response to Intervention

HOW DO YOU CHOOSE ACROSS DOMAINS OF STUDENT FUNCTIONING?

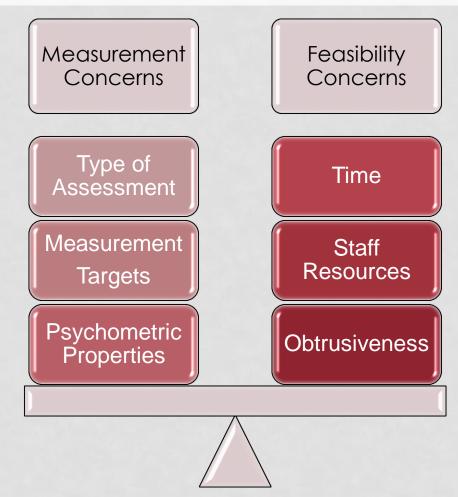
Behavioral:

- Rating scales
- Direct observation
- Discipline referrals
- Classroom mgt. systems



SUMMARY: THE CHALLENGE

How do we balance data decisions across student domains of functioning and RTI Tiers in a cohesive system – one that is comprehensive, efficient, and coordinated?



Adapted from Briesch & Volpe (2007)

BUILDING COHESIVE DATA SYSTEMS

COMPREHENSIVE, EFFICIENT, COORDINATED

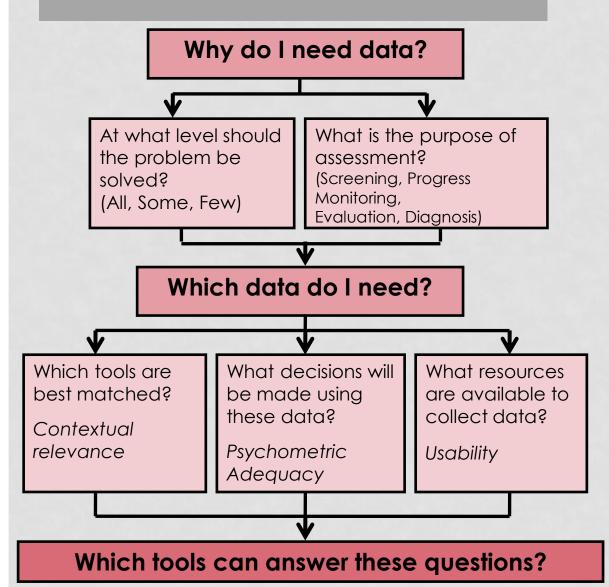
GUIDING QUESTIONS

- who
- what
- where
- when
- why

PRIORITIZE THE ORDER

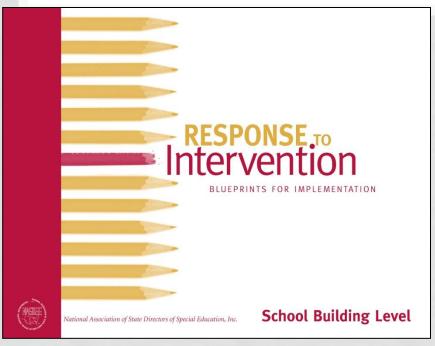
- 1. WHY
- 2. WHAT
- 3. WHO
- 4. WHEN
- 5. WHERE

FIRST... WHY & WHAT

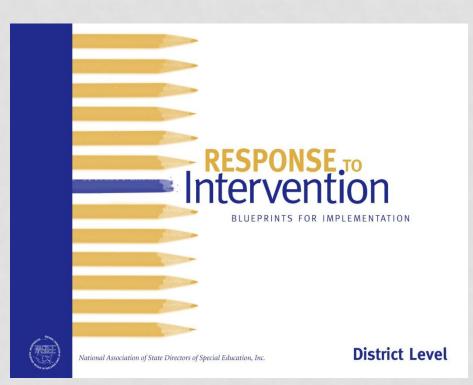


THEN...
WHO
WHEN
WHERE

WHAT IS AVAILABLE TO GUIDE DECISIONS AROUND "DATA" SYSTEMS?



National Association of State Directors of Special Educators www.nasdse.org



A LITTLE BACKGROUND ON THE BLUEPRINT FORMAT...

Step	Resources Available		Wisdom from the field	
			leadership team, including facilitator, coach, content	
			specialist, data mentor and staff liaison. One person	
			may serve more than one function. These individuals will require deep and broad knowledge and skills.	
			Ultimately, it is most effective to have standards and	
		*	benchmarks for these roles, aligned with high quality	
			professional development for the individuals who will	
			serve in these capabilities. As the leadership team	
			THE THE PARTY OF T	
		Step	Implementation Rating (0, 1, 2)	Action Planning and Activities
Function 1: Data	The North Central Regi	as indicated by	implementation Rating (0, 1, 2)	Action Flamming and Activities
Mentor	has established a webs	data.		
	resources designed to I	uata.	Action 4: Monitor Imple	mentation
	become comfortable wi	General	Action 4: Wonitor Implei	nentation.
	resources can be acces	Considerations		
	http://www.ncrel.org/dat	Step 1: Develop an		
	The National Dissemina The National Dissemina	evaluation cycle to		•
	Children with Disabilitie several resources on ex	monitor		
	and making sense of st	implementation of		
	http://research.nichcy.o	all instructional		
	Edward R. Tufte has se	programs.		
	displaying data that are	Step 2: Use		
	commercially.	systematic methods		
	Getting Excited About L	to monitor		
	Holcomb outlines a pro-	implementation of		
	well a school or district	instructional		
	goal: sustained student	programs.		
Function 2:	available commercially. Academics	Step 3: Adjust the		
Content Specialist	To gain knowledge of e	program based on		
Content Specialist	when they should be ac	ongoing analysis of		
	Ideas in Beginning Rea	implementation integrity and other		
	http://reading.uoregon.e	data.		
		data.	Action 5: Collect and summarize pro	gram avaluation data
		General	Action 5. Collect and summarize pro	grain evaluation data.
		Considerations		
		Step 1: Examine		
		data on changes in		
		the percent of		
		students		
		considered to need		
		core, supplemental		
		and intensive		
		instruction.		

A LITTLE BACKGROUND ON THE BLUEPRINTS: KEY POINTS

- There are critical components of RtI implementation that if not attended to can render otherwise acceptable implementations ineffective.
- The school building is the unit of change in RtI. Multiple buildings within a district can implement RtI, but their implementations will likely be somewhat different.
- District-level supports must be systematically built in to support buildinglevel implementation.
- State-level supports must be systematically built to support district- and building-level implementation.
- Building change should be guided by the answers to key questions. By answering a specific set of interrelated questions, using the scientific research and site-based data, buildings can be assured that they are implementing the major components of Rtl. Specific mandated answers to these questions should not be imposed uniformly across all buildings.

Source: NASDSE blueprint on RTI implementation (school building level)

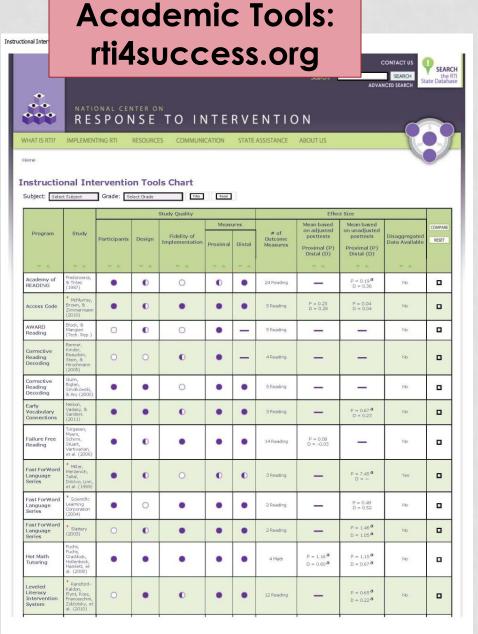
THREE "COMPONENTS" TO IMPLEMENTATION

- . **Consensus building** variete Rtl concepts are communicated broadly to implementers and the foundational "whys" are taught, discussed and embraced.
- Infrastructure building where sites examine their implementations against the critical components of RtI, find aspects that are being implemented well and gaps that need to be addressed. Infrastructure building centers around closing these practice gaps.
- . Implementation where the structures and supports are put in place to support, stabilize and institutionalize RtI practices into a new "business as usual."

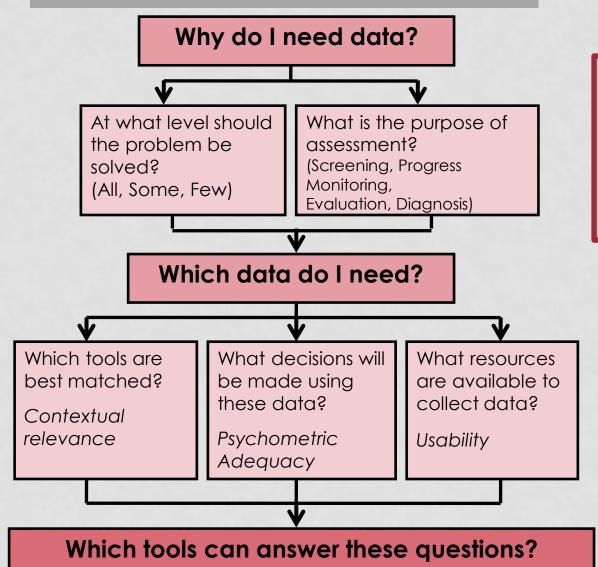
Source: NASDSE blueprint on RTI implementation (school building level)

CONSENSUS BUILDING...

what do we value/believe fits/need for our setting?



FIRST... WHY & WHAT



INFRA-STRUCTURE BUILDING...

Adapted from Chafouleas, Riley-Tillman, & Sugai, 2007

COMPONENT 2: INFRASTRUCTURE

Action 1. Form a leadership team Step 1: Assign roles.

- Data Mentor
- Content specialist
- Facilitator
- Staff liaison
- Instructional leader/resource allocation

WHO SERVES THE DATA MENTOR IN YOUR SETTING?

Step	Resources Available	Wisdom from the field
		leadership team, including facilitator, coach, content specialist, data mentor and staff liaison. One person may serve more than one function. These individuals will require deep and broad knowledge and skills. Ultimately, it is most effective to have standards and benchmarks for these roles, aligned with high quality professional development for the individuals who will serve in these capabilities. As the leadership team members are selected, match pre-existing skills and dispositions with those expected to be learned and
Function 1: Data Mentor	The North Central Regional Educational Lab has established a website with a series of resources designed to help educators become comfortable with using data. These resources can be accessed at http://www.ncrel.org/datause/ The National Dissemination Center for Children with Disabilities (NICHCY) has several resources on evaluating research and making sense of statistics at http://research.nichcy.org/research101.asp Edward R. Tufte has several books on displaying data that are available commercially. Getting Excited About Data by Edie	The data mentor is the person with expertise in collecting, organizing, displaying, analyzing and interpreting data. This person should not be the sole person who works with the data, but rather should assist all in understanding and using data. The data mentor should have the necessary skills to present data in easily understandable visual displays. Teachers and leadership teams need to understand data-based decision making and the set of rules on which it is based, and be able to apply those rules in the interpretation of the data. Structures within the system need to be established to allow for time and resources needed to carry out this role.
	Holcomb outlines a process for showing how well a school or district meets its primary goal: sustained student learning. The book is available commercially.	
Function 2: Content Specialist	Academics To gain knowledge of early literacy skills and when they should be addressed, visit Big Ideas in Beginning Reading at http://reading.uoregon.edu/	This person will be the team member who ensures that when new curricular materials are obtained, implementers are adequately trained to use the materials. This person will also check fidelity of use of curricular

COMPONENT 2: INFRASTRUCTURE

ACTION 3: THE LEADERSHIP TEAM WORKS THROUGH 10 BASIC QUESTIONS TO DEVELOP ACTION PLANS.

Question 1: Is our core program sufficient?

 identify screening tool, identify proficiency cut points, collect universal screening data, organize/summarize/display data, determine acceptable % proficiency, identify % of students meeting proficiency, make comparison, determine what works/doesn't work

Question 4: How will the sufficiency and effectiveness of the core program be monitored over time?

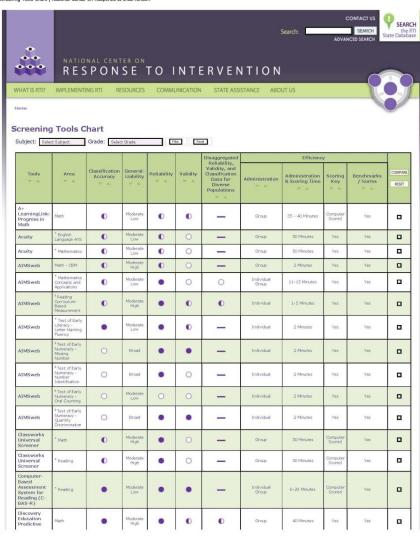
 Step 1: Determine key indicators of success. Determine baseline, establish goals, develop the collection plan, schedule to analyze data

Source: NASDSE blueprint on RTI implementation (school building level)

WHAT ARE THE KEY FEATURES OF "GOOD" SCREENING TOOLS?

reening Tools Chart | National Center on Response to Intervention

- Defensibility
 - Classification accuracy
 - Reliability
 - Validity
- Efficiency/Feasibility
 - Time
 - Personnel
 - Cost



http://www.rti4success.org/screeningTools[5/8/2012 9:02:08 PM]

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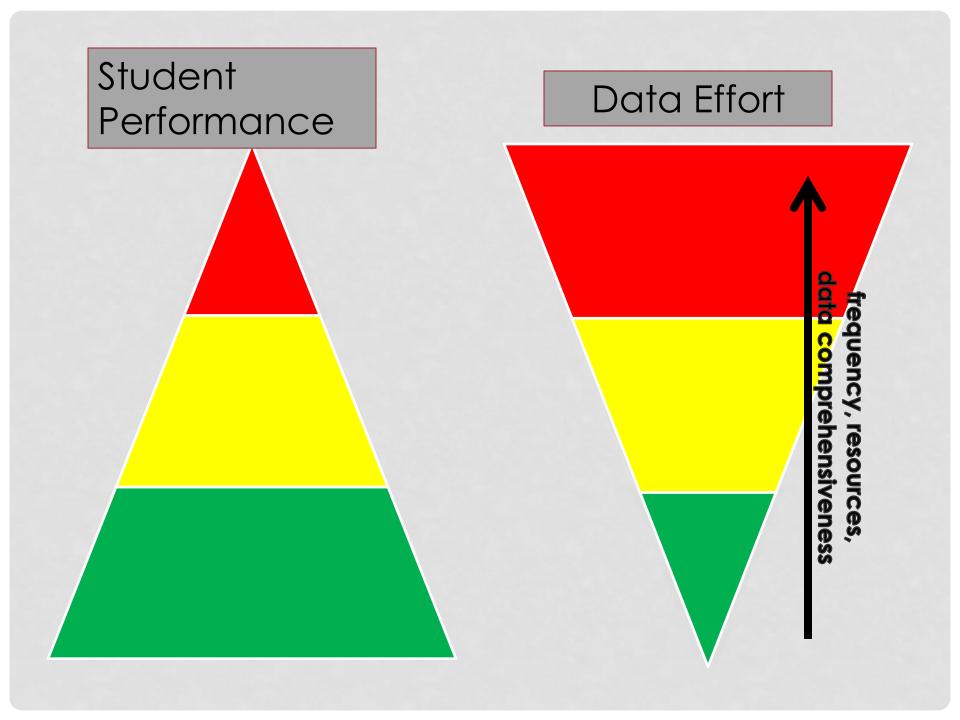
SAMPLE "CORE" EVALUATION PLAN

Purpose	Scope	Goal	Assessment	Rationale	Frequency	Decision- making
Screening: Academic	Universal K-5 Reading	To identify students in need for more intensive intervention	СВМ	 Assessment of key early literacy skills Efficient National norms aid in decision-making 	Sept, Jan, May	Data will be reviewed at the end of the month during which the screeners were administered
Screening: Behavior	Universal K-5 Behavior	To identify students in need for more intensive intervention	Behavior Screening Guide	 Key scales such as prosocial behavior, academic engagement, compliance. Research supports reliability & validity of scores 	Sept. and Jan.	Data will be reviewed at the end of the month during which the screeners were administered
Progress monitoring						
Evaluation						

REMEMBER... WE ARE STILL IN TIER 1 (ALL STUDENTS)!

Question 6: For which students is the core instruction sufficient or not sufficient? Why or why not?

- This is where decision making moves to small group and individual decision making.
- Plan for, and allocate, sufficient time for data analysis.
- This step can be completed with varying levels of rigor. Screening data can be used to address many of these questions. The more serious student problems, the more in-depth the problem analysis should be...



AS EFFORTS GO UP, TRY NOT TO RE-INVENT THE WHEEL

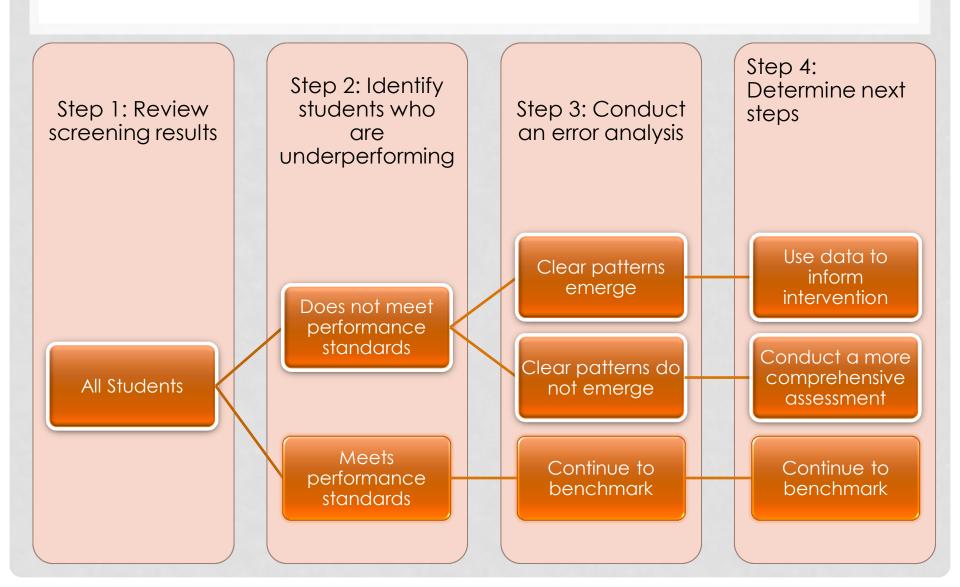
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MAXIMIZING DATA USE

- Utilize existing sources of data for decision-making
 - Especially at secondary level
- Consider data sources that will give you the most "bang for your buck"
- Maximize the utility of the data you're collecting by using it for multiple purposes
 - Screeners can be used to identify students at-risk (Tier 1)
 - Can also inform intervention (Tier 2)
 - Error analysis for CBM
 - Identify and target areas of weakness

SCREENING FRAMEWORK



PUTTING IT ALL TOGETHER: IMPLEMENTATION

MOVING FROM CONSENSUS AND INFRASTRUCTURE BUILDING

PURPOSE & LOGISTICS

- Who will collect these data?
 - Training?
- What decisions will be made?
 - Intervention
 - Placement

Timelines

- Data collection
- Data synthesis
- Data review

Structure for review

- Frequency
- Participants
- Who will set agenda, goals, and objectives?
- Decision rules

OBJECTIVES FOR SCHOOL LEVEL IMPLEMENTATION

- The school builds its master calendar and master schedule around the instructional needs of students.
- The needs of students with core, supplemental and intensive needs are addressed appropriately in this structure.
- Supplemental and intensive instructions are in addition to, rather than instead of, core instruction.
- Implementation supports are systematically built into the system and are carried out as planned.
- Scheduled dates are identified for all assessments (screening, diagnostic and progress monitoring).
- Scheduled dates are identified for decision-making about students' instruction (flexible grouping).
- Sufficient expertise is available to assist the school in making databased decisions about students' instruction.
- Successes, no maiter how small, are celebrated by all involved.
- A project-level evaluation plan is created and put in place. Data are collected over time.

SAMPLE MONTHLY ASSESSMENT SCHEDULE

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Academic									
CBM	X				X				Χ
State							X		
Behavior									
Screener	Χ				Χ				Χ
ODR		Χ		X		X		Χ	

Note. Adapted from Lane et al. (2012)

Considerations:

- Assessments can include teacher nominations
- Build assessments into your calendar before the school year starts
- Consider time and resources when scheduling assessments
- Use assessment schedule to develop a data review plan

SAMPLE DATA REVIEW SCHEDULE

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Academic				
CBM	X	X	X	X
State	Χ			
Behavior				
Screener	Χ	X	X	X
ODR	Χ	X	Χ	X
Attendence		X		X
Program				
Referrals		X		X

SANETTI, L. M. H., CHAFOULEAS, S. M, BERGGREN, M., FAGGELLA-LUBY, M., & BYRON, J. (2012). THE IMPACT OF EXPLICIT INSTRUCTION PLUS BEHAVIOR INTERVENTION ON STUDENT OUTCOMES. MANUSCRIPT IN PREPARATION.

PRACTICE-RESEARCH EXAMPLE

BACKGROUND

THE "SCHOOL"

- Grades 3-5 in suburban district
- Team beginning to re-structure in alignment with SRBI, PBIS in full implementation

THE "PROBLEM"

 School personnel would like to ensure the small group reading supports led by a paraprofessional are also meeting behavioral needs of the students

THE "CASE"

- EXAMPLES FROM GRADE 4 GROUPS
 - Group 1: 3x/week before school with 7 students
 - Two Males (4.1, 4.2 served as participants)
 - Group 2: 3x/week before school with 6 students
 - One Male (4.3 served as participant)

WHY AND WHAT? SCREENING DATA

Student ID	CMT Reading	ORF (winter percentile)	Maze (winter percentile)	Direct Observation (Engagement)	Direct Observation (Disruption)
4.1	basic	134 (>50% but <75%)	20 (>50%)	40%	7%
4.2	proficient	106 (>25% but <50%)	13 (<50)	62%	23%
4.3	n/a	98 (>25 but <50	20 (>50)	70%	13%

BEHAVIOR INTERVENTION: DAILY REPORT CARD (DRC)

- Student and teacher ratings of behavior allows for identification, monitoring, and change of targeted behavior difficulties
- Most common identified behaviors:
 - Did I follow class rules?
 - Did I follow teacher directions?
 - Did I do my best work?
 - Did I respect my classmates and teacher?
- If a student earns all "yeses" for 3 out of 5 days, a "reward" is earned

Daily Report C	Card						
Student's name:	Date						
ACTIVITY:							
Did I follow class rules?	Yes	No	Yes	No	Yes	Ν	
Did I follow teacher directions?	Yes	No	Yes	No	Yes	Ν	
Did I do my best work?	Yes	No	Yes	No	Yes	Ν	
	Yes	No	Yes	No	Yes	٨	
	Yes	No	Yes	No	Yes	N	
Total number of "Yes" ratings: Total number of "No" ratings: Reward level: Half "yes"/ half "no" ratings 2x as many "yes" as "no" ratings All "yes" ratings!	Reward chosen: Time reward delivered:						
Copy of DRC sent home: Yes No Teacher initials:							

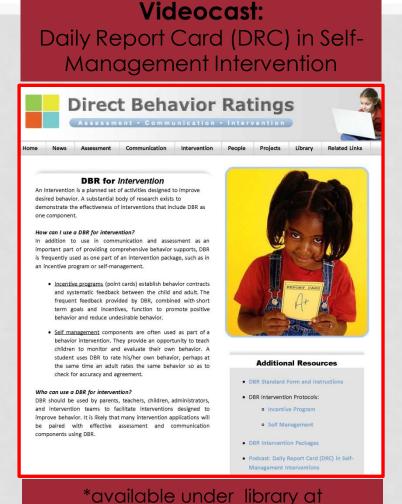
Daily Report Card (DRC) – Reminder Sheet

- Define the behavior of interest (usually 1-5)
 Select the rating period and frequency
 Design and prepare the card following the rating occasion
 Conduct the ratings
 Evaluate behavior by comparing rating to pre-set goal or rating by another
- ☐ Record data to use in monitoring progress

Adapted from Chafouleas, S.M., Riley-Tillman, T.C., Christ, T.J., & Kilgus, S.P. (2010). Direct Behavior Ratings: Linking Assessment, Communication, and Intervention. In A. Canter, L. Paige, and S. Shaw (Eds), Helping children at home and school II: Handouts for families and educators. Bethesda, MD: National Association of School Psychologists.

PARAPROFESSIONAL TRAINING

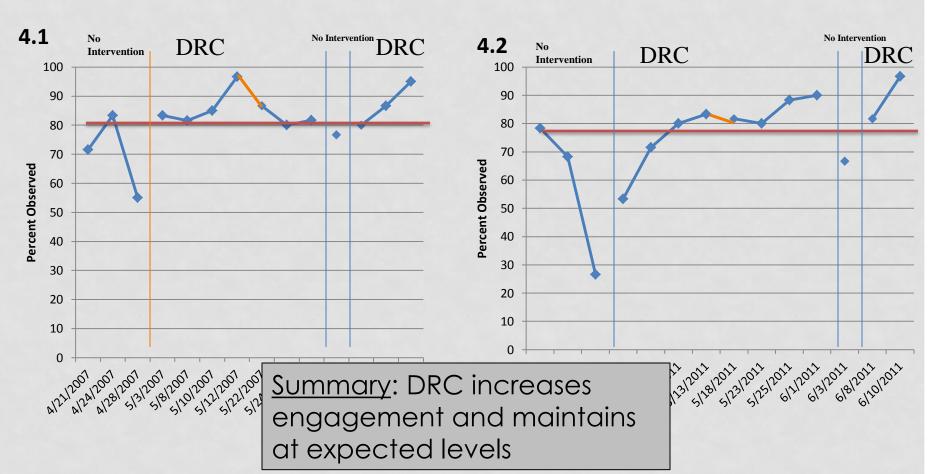
- Completed using videobased training on DRC
 - Teachers watched brief video* and then met with consultant to specify procedures for the group
 - Teachers were provided with a reminder sheet (previous slide) and copy of training video for rereview as desired
- Consultant "checked-in" with teacher throughout study to replace materials and modify condition as needed for research study purposes



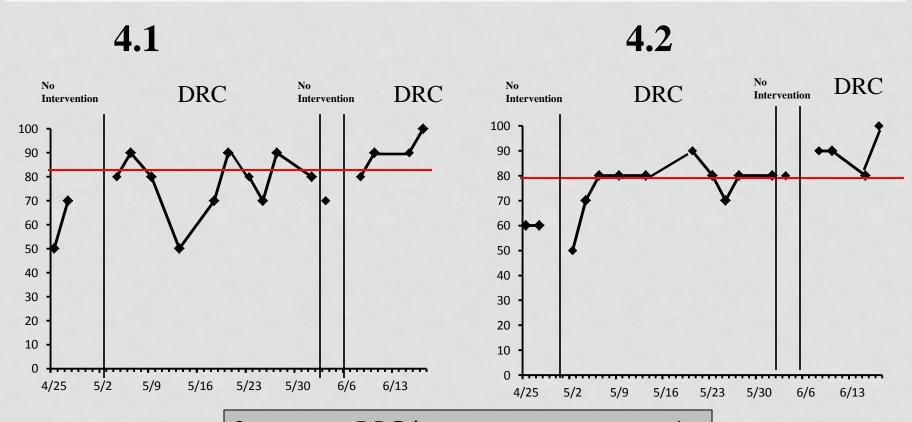
www.directbehaviorratings.org

DIRECT OBSERVATION: ACADEMIC ENGAGEMENT

Group 1



TEACHER-COMPLETED: DIRECT BEHAVIOR RATING (DBR)

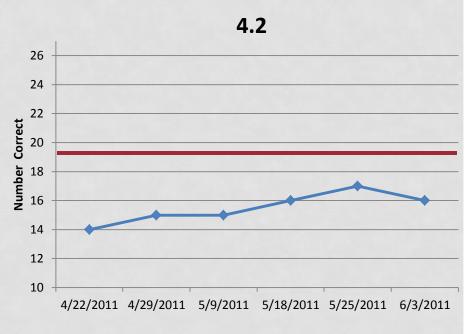


<u>Summary</u>: DRC increases engagement and maintains at expected levels, DBR data maps consistently with researchercompleted direct observation

ACADEMIC RESULTS: MAZE PASSAGE

Group 1



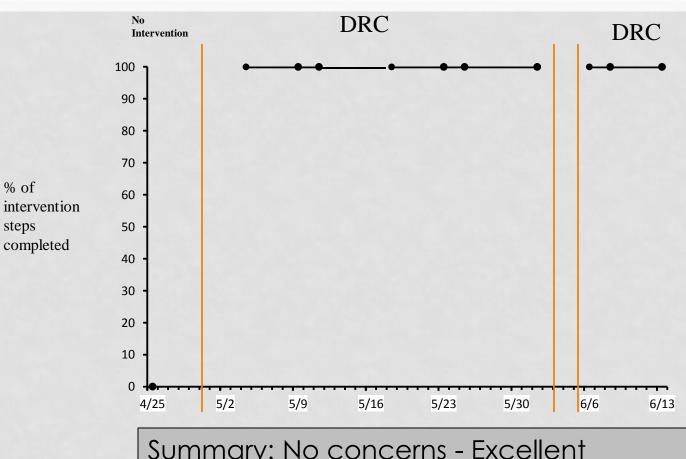


Not applicable

Ambitious growth rate = .4 /week

+2/6 wks = .33

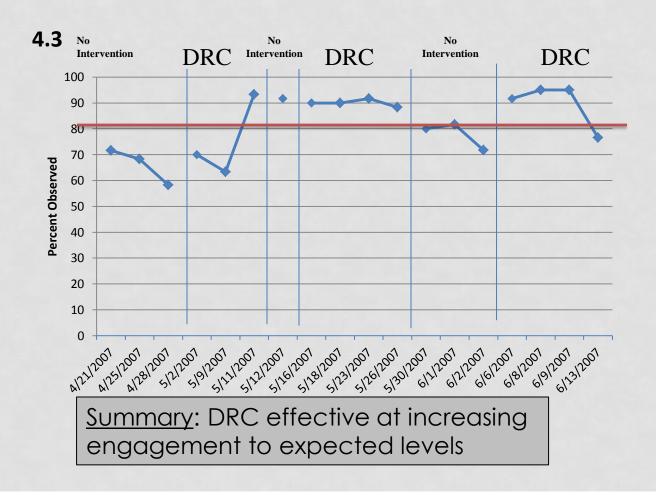
TREATMENT INTEGRITY



<u>Summary</u>: No concerns - Excellent treatment integrity

BEHAVIOR RESULTS: ACADEMIC ENGAGEMENT

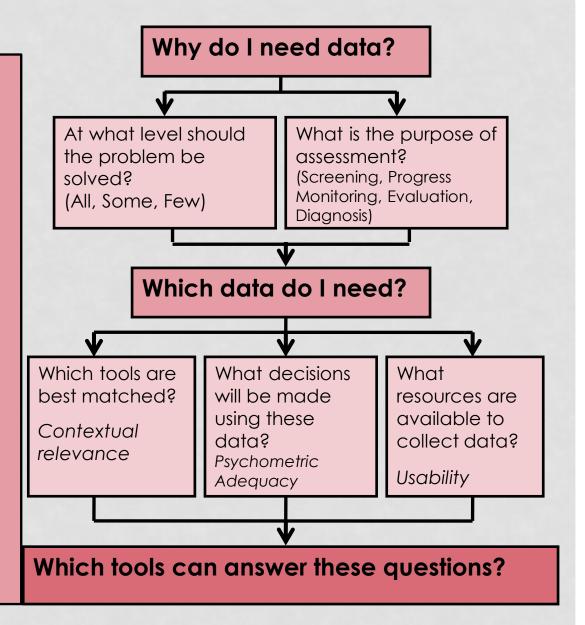
Group 2



CONCLUDING THOUGHTS

The Road to Cohesive Systems... PLAN, IMPLEMENT, & EVALUATE

- 1. WHY
- 2. WHAT
- 3. WHO
- 4. WHEN
- 5. WHERE

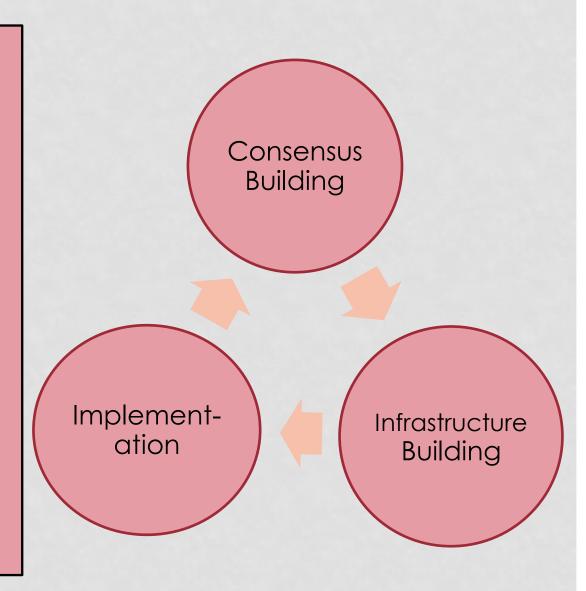


Adapted from Chafouleas, Riley-Tillman, & Sugai, 2007

The Road to Cohesive Systems...

PLAN, IMPLEMENT, & EVALUATE

- 1. WHY
- 2. WHAT
- 3. WHO
- 4. WHEN
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FURTHER RESOURCES

National Association of State Directors of Special Education, Inc.: Response to Intervention Project

http://www.nasdse.org/Projects/ResponsetoInterventionRtlProject/tabid/411/Default.aspx

National Center on Response to Intervention

http://www.rti4success.org/

Direct Behavior Rating

www.directbehaviorrating.org

QUESTIONS, COMMENTS, CONTACTS...

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- Dr. Faith Miller <u>faith.miller@uconn.edu</u>