

RTI and Behavior Issues Among Middle School Students: Project ASSIST

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What is RTI?

1. Decision making and problem solving structure for allocating resources to student need
2. Commitment to evidence-based interventions
3. Emphasis on student performance (i.e., responsiveness to effective intervention) for instructional decision making
4. RTI is special education placement as a result of “an inadequate change in target behaviors as a function of intervention.”
5. RTI uses data-driven decision making to modify the nature of instruction or interventions.

(Gresham, 2005; Sugai, 2007)

[RTI]

- RTI affords increased efficiency, accountability, and impact
- RTI is not a
 - program,
 - curriculum,
 - strategy,
 - intervention,
- RTI is not limited to special education

Sugai, 2007

[RTI: Components]

- Problem solving model
- Diagnostic-prescriptive teaching
- Curriculum based assessment
- Applied behavior analysis
- Systemic early literacy
- School-wide positive behavior support
- IDEA Policy

Sugai, 2007

[RTI Logic]

- Teach with best curriculum and instruction
- Intervene early at all levels
- Screen universally and frequently
- Be diagnostic/prescriptive for nonresponders
- Intensify and specialize for nonresponders

Sugai 2007

[How does RTI relate to
serving students with EBD?]

Definition of ED

- A condition characterized by one or more of the following characteristics over a long period of time and to a marked degree which adversely affects educational performance:
 - (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors;
 - (b) an inability to build or maintain satisfactory interpersonal relationships with peers or teachers;
 - (c) inappropriate types of behaviors or feelings under normal circumstances;
 - (d) a general pervasive mood of unhappiness or depression; or
 - (e) a tendency to develop physical symptoms or fears associated with personal or school problems.

Gresham, 2005

Emotional Disturbance

- Prevalence
 - 1-2% of Children and Youth
- Underservice
 - Between 2 and 20% of the school age population demonstrate behavior patterns indicative of EBD (Walker, Ramsey, & Gresham, 2004).
 - Reasons for underservice include philosophical and fiscal issues (Walker, Ramsey, & Gresham, 2004)

Gresham, 2005

[Serious Emotional Disturbance]

- Presents challenges for:
 - Teachers
 - Schools
 - Parents
 - Peers

- Affects all domains, including:
 - Disciplinary
 - Instructional
 - Interpersonal

Gresham, 2005

[Disheartening Outcomes]

- Students with EBD pose challenges to administrators, teachers, and the community as a whole (Lane, 2004; Kauffman, 2005).
- Negative within school outcomes (Wagner, 1995; Wagner & Davis, 2006).
- Negative post-secondary outcomes (Bullis & Yovanoff, 2006; Kauffman, 2005).

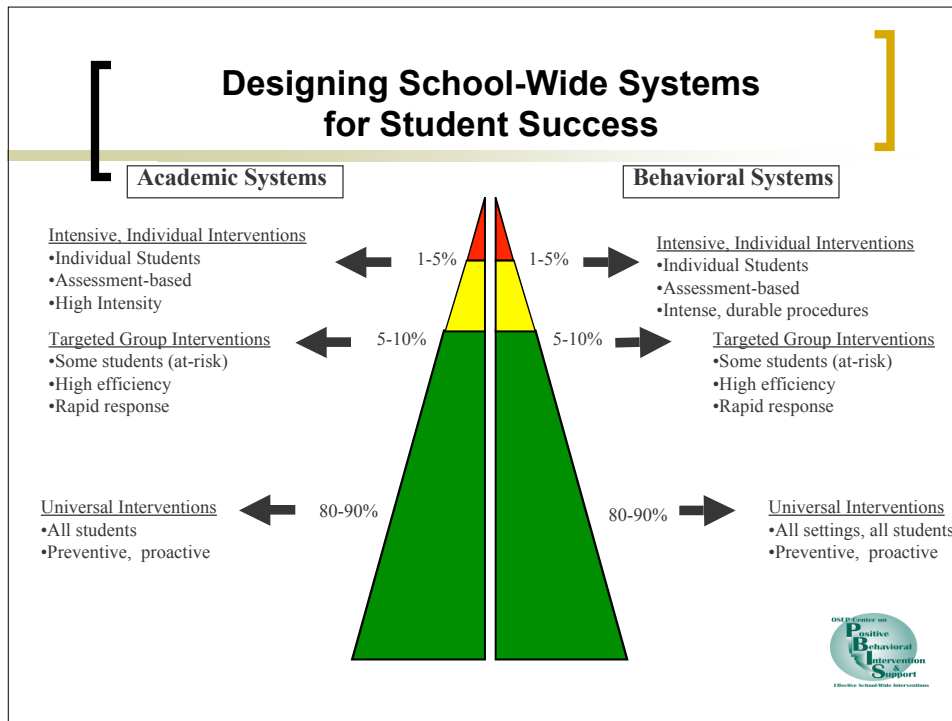
Response to Intervention in EBD Identification and Placement

- RTI is a relatively new approach to
 - making eligibility determinations
 - selecting or titrating interventions
- RTI logic
 - if a student's behavioral excesses and /or deficits continue at unacceptable levels subsequent to an evidence-based intervention implemented with integrity, then the students can/should be eligible for special education services (IDEIA, 2004) under the ED label

RTI Applications

	EARLY READING/LITERACY	SOCIAL BEHAVIOR
TEAM	General educator, special educator, reading specialist, Title 1, school psychologist, etc.	General educator, special educator, behavior specialist, Title 1, school psychologist, etc.
UNIVERSAL SCREENING	Curriculum based assessment	SSBD, ODR
PROGRESS MONITORING	Curriculum based assessment	ODR
EFFECTIVE INTERVENTIONS	5-specific reading skills: phonemic awareness, phonics, fluency, vocabulary, comprehension	Teaching & encouraging social behavior directly
DECISION MAKING RULES	Core, strategic, intensive	Primary, secondary, tertiary tiers

Sugai, 2007



RTI in ED Placement

- If a student's behavioral excess or deficits continue to interfere with instruction despite evidence-based interventions implemented with integrity then the student should be identified as ED.
- RTI is based on the best practices of prereferral intervention.
- RTI gives school personnel the latitude to function within an intervention framework instead of an eligibility framework.

Gresham, 2005

Possible RTI Outcomes (Gresham, 2005)

	Responder (not ED)	Non-Responder (ED)
ED	False Positive (Adequate Response)	True Positive (Inadequate Response)
Not ED	True Negative (Adequate Response)	False Negative (Inadequate Response)

Factors Related to a Behavior's Response to Intervention

1. Severity
2. Chronicity of behavior
3. Generalizability of behavior change
4. Treatment strength
5. Treatment integrity
6. Treatment effectiveness

Gresham, 2005

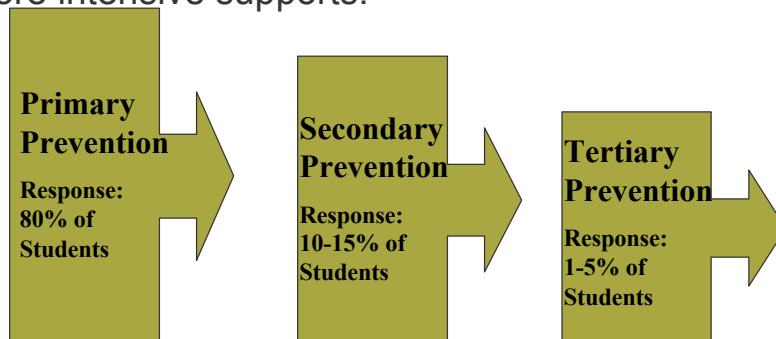
[RTI Model]

“An important concept in an RTI model is that it matches the intensity of the intervention to both the severity of the problem behavior and the problem behavior’s resistance to intervention efforts.”

Gresham, 2005

[Positive Behavior Support]

For students with behavioral challenges, PBS provides graduated support as needed to (a) prevent the development of behavioral problems that may lead to EBD and (b) support students with EBD via more intensive supports.



[Purpose]

This presentation documents three approaches to using school-wide data to identify and support K-12 students who are nonresponsive to primary prevention efforts. We illustrate three different techniques for supporting these students using targeted interventions.



Project ASSIST: An Illustration at the Middle School Level

Purpose

- Two voids:
 - First, school-wide data are used to identify middle school students in need of secondary support.
 - Second, we examine the utility of an academic (study skills) and behavioral (conflict resolution skills) intervention relative to regular school practices for middle schools students identified by school-wide data as having academic and behavioral deficits.

Middle School: Demographics

Source	Variable	Level	N (%)
Teachers	Employed		37
Students	Total Enrollment		536
	Special Education		21.08%
	Gender	Male	289 (51.24%)
	Ethnicity	Caucasian	522 (97.38 %)
		African American	6 (1.11%)
		Hispanic	7 (1.30%)
		Asian	1 (0.18%)

Middle School: Primary Plan

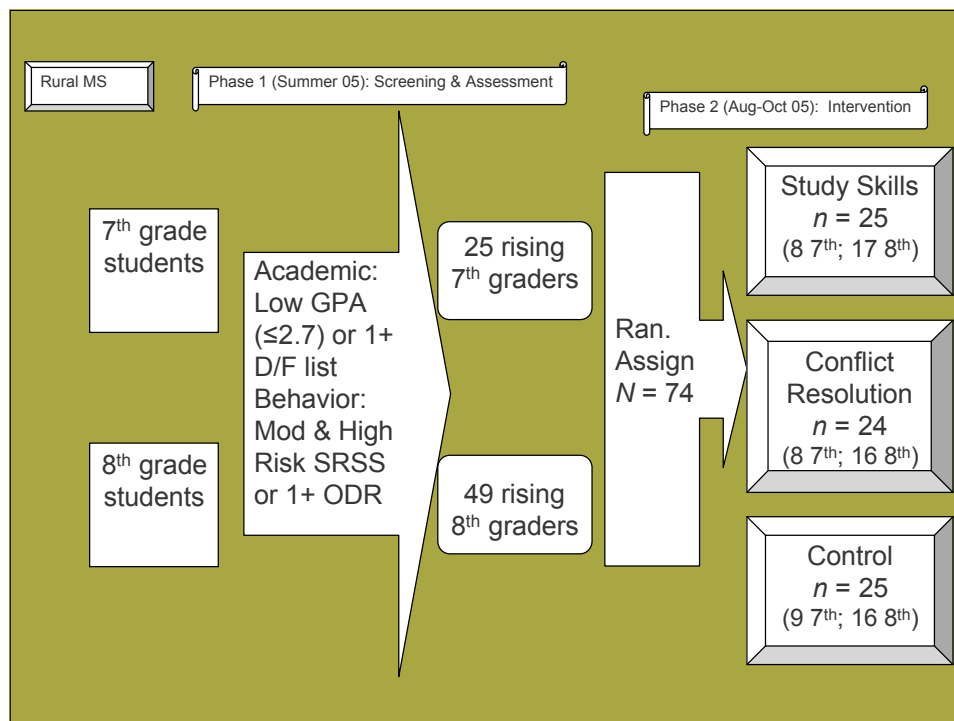
- Mission & School-wide Expectations
- Procedures for Teaching
 - 5 School-wide Expectations
 - Daily Expectation Videos
- Procedures for Reinforcing
 - Tickets
 - Monthly School-wide Drawings and Assemblies
- Procedures for Monitoring
 - Student Outcomes
 - Treatment Integrity & Social Validity

Middle School: Assessment Schedule

Measure	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY
Attendance	X	X	X	X	X	X	X	X	X	X
SWIS ODR	X	X	X	X	X	X	X	X	X	X
GPA			X		X			X		X
ALC, SPED,	X	X	X	X	X	X	X	X	X	X
Tickets	X	X	X	X	X	X	X	X	X	X
SRSS		X			X					X
Treatment Integrity	X	X	X	X	X	X	X	X	X	X
Social Validity	X									X
EBS Survey	X									X

Identifying Nonresponsive Students: Inclusion Criteria

- 7th and 8th Grade Students
- Behavioral Concern
 - Student Risk Screening Scale (moderate: 4-8 or high risk: 9-21) or
 - Discipline Referral (1+ *during Quarter 4*)
- Academic Concern
 - GPA (≤ 2.7) or
 - Failure List (1+ D or F *at year end*)



Project ASSIST: Participant Characteristics				
		Study Skills <i>n</i> = 13 <i>n</i> (%)	Conflict Resolution <i>n</i> = 15 <i>n</i> (%)	Control <i>n</i> = 17 <i>n</i> (%)
Gender	Male	10 (76.92)	10 (66.67)	13 (76.47)
	Female	3 (23.08)	5 (33.33)	4 (23.53)
Ethnicity	White	13 (100.00)	15 (100.00)	17 (100.00)
Grade	7	6 (46.15)	4 (26.67)	7 (41.18)
	8	7 (53.85)	11 (73.33)	10 (58.82)

Project ASSIST: Participant Characteristics			
	Study Skills M(SD)	Conflict Resolution M(SD)	Control M(SD)
Age	13.07 ^a (0.80)	13.53 ^a (0.55)	13.35 ^a (0.90)
MAT8 Reading	30.38 ^a (16.39)	23.53 ^a (22.76)	24.00 ^a (20.47)
CARS	2.15 (0.09)	2.94 (0.09)	2.06 (0.71)
Sessions Attended	97.02 (2.38)	97.63 (3.03)	100.00 (0.00)

Project ASSIST: Intervention Procedures			
	Study Skills	Conflict Resolution	Control
Facilitator	Teachers	Counselors	Teachers
Duration	31 Lessons: 1 st Quarter	31 Lessons: 1 st Quarter	Regular School Practices
Logistics	30 min Instruction 20 min Practice	30 min Instruction 20 min Practice	Standard Elective Class: Focus

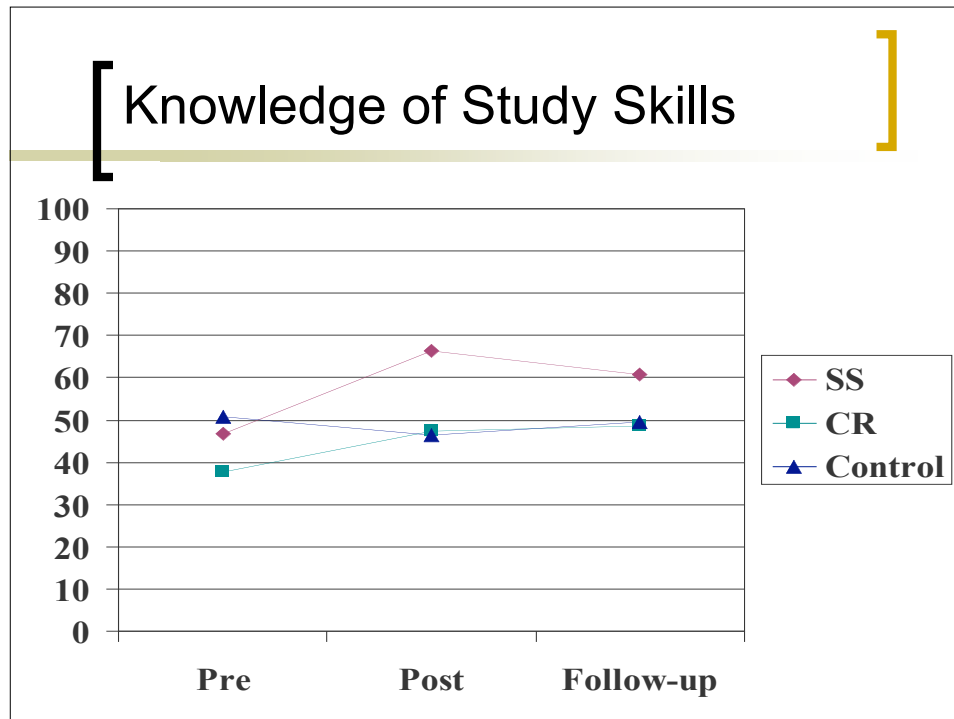
Project ASSIST: Outcome Measures		
Secondary		Descriptive & Fidelity Data
<i>Proximal</i>	<i>Distal</i>	
Knowledge of Study Skills (KSS) Percentage	Study Habits Inventory (Jones & Slate, 1990) Percentage	CIRP-Social Validity Score Range 7-42
Knowledge of Conflict Resolution Skills (KCRS) Percentage	ConflictTalk (Kimsey & Fuller, 2003) range: 0 to 30	Treatment Integrity, Teacher and Research Assistant Perspectives
	Problem Behavior Rating (SSRS; Gresham & Elliott, 1990) Standard Scores	

Experimental Design & Statistical Analysis

- Experimental Design
 - Pre-, Post-, Follow-up Experimental Design
- Statistical Analysis Plan
 - Student outcome data were analyzed with a longitudinal random coefficients analysis (Littell, Milliken et al. 2006) applied to three repeated measurements: pre-intervention, post-intervention, and maintenance, the later of which was collected 8 weeks following intervention.
 - This model, also known as “individual growth curves” (Rogosa and Saner 1995) estimates a separate starting intercept for each child to control for the clustering of repeated measurements.
 - A total of five models were estimated for the 5 outcomes: two near transfer (KSS, KCRS) and three far transfer (SHI, ConflictTalk, problem behavior)

Proximal Measures: Knowledge of Study Skills and Conflict Skills

		Study Skills <i>M (SD)</i>	Conflict Resolution <i>M (SD)</i>	Control <i>M (SD)</i>
Study Skills	Pre	46.77 (17.2)	37.60 (20.6)	50.82 (13.1)
	Post	66.46 (11.3)	47.47 (15.3)	46.35 (19.5)
	Follow-up	60.62 (13.8)	48.53 (17.6)	49.65 (20.8)
	ES 1:2	1.38	0.55	-0.27
Conflict Resolution Skills	Pre	34.77 (12.0)	34.13 (13.5)	44.24 (9.8)
	Post	39.08 (12.2)	38.40 (12.6)	35.76 (16.2)
	Follow-up	38.77 (7.0)	36.00 (13.0)	37.41 (19.4)
	ES 1:2	0.36	0.33	-0.65



- ### Results: Overview
- Both intervention conditions demonstrated increases in knowledge of skills relative to controls.
 - Yet, neither intervention group was performing at mastery.
 - Limited change in distal measures.



Recommendations: A Look to the Future

[Future Directions]

- The use of school-wide data should continually be used to identify non-responders for targeted interventions.
- Balance between scientific rigor and feasibility.
- Consider pragmatic versus methodological success as we explore targeted interventions at the elementary, middle, and high school levels.

Goal: Refine the Model

- Use teacher expectations to develop primary plans
- Systematic screening to identify students who are nonresponsive to primary intervention efforts
- Scientifically rigorous secondary interventions to (Gersten et al., 2005; Kauffman, 2005; Horner et al., 2006)
 - clarify the relationship between academic underachievement and problem behavior
 - enhance academic outcomes for students with and at risk for EBD
 - improve the quality and quantity of treatment-outcome studies by adhere to quality indicators (Sasso, 2003)
 - consider pragmatic versus methodological success

Goal: Refine the Model

- Goal of intervention research:
 - Meaningful, lasting change (Baer, Wolf, & Risely, 1968)
- An additional goal: Responsible inquiry
Leave our schools sites - the playing field for our inquiry - better than we found them, able to sustain evidence-based practices.