The Elementary Teacher as 'First Responder': Building the Classroom Intervention Toolkit

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## Handout

Re

RTI/MTSS Classroom Teacher Toolkit

First Responder: How Teachers Can Provide Effective Classroom Academic Interventions Jim Wright, Presenter

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Email: jimw13159@gmail.com Workshop Materials: http://www.interventioncentral.org/guilderland

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## Workshop PPTs and handout available at:

## http://www.interventioncentral.org/guilderland

## What Classroom Supports Help a Struggling Student?

1. PROBLEM IDENTIFICATION. The student's specific academic deficits have been clearly defined.



- 2. INTERVENTIONS. The student receives research-based interventions to help them to succeed in core instruction.
  - 3. ACCOMMODATIONS. The student has access to classroom accommodations as needed to reach grade-level potential.
  - 4. PLAN. The student has a written intervention plan.
  - 5. DATA. The student has assessment data collected to better understand the academic delay and/or to track progress.

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For Want of a Nail (proverb)

66

For want of a nail the shoe was lost...



For want of a shoe the horse was lost...

For want of a horse the knight was lost...

For want of a knight the battle was lost...

For want of a battle the kingdom was lost...

So a kingdom was lost—all for want of a nail.



*RTI/MTSS for Academics: An Overview.* What does the RTI/MTSS model look like?





## RTI vs. MTSS: What is the Difference?

Many schools use the terms Response to intervention (RTI) and Multi-Tier System of Supports (MTSS) interchangeably. However, there is a difference.

- RTI usually refers to a school's academic support system only.
- MTSS is more expansive, describing the systems set up in a school to provide coordinated support for both academic and behavioral/social-emotional needs.
- However, RTI and MTSS are similar in that each offers several levels of intervention support, uses data to identify students requiring services, and employs research-based strategies to help at-risk learners.

## MTSS: ACADEMICS

#### Tier 3: High-Risk Students: 5%

- Diagnostic assessment of academic problems
- RTI Team Meetings
- Customized/intensive academic intervention plan
- Daily progress-monitoring

#### Tier 2: At-Risk Students: 15%

- Small-group interventions to address off-grade-level academic deficits
- Regular progress-monitoring

#### Tier 1: Universal: Core Instruction: 80%

- Effective group instruction
- Universal academic screening
- Academic interventions for struggling students



## MTSS: BEHAVIOR

#### Tier 3: High-Risk Students: 5%

- Functional Behavioral Assessments (FBAs)
- Behavior Intervention Plans (BIPs)
- Wrap-around RTI Team meetings
- Daily progress-monitoring

#### Tier 2: At-Risk Students: 15%

- Small-group interventions for emerging behavioral problems
- Regular progress-monitoring

#### Tier 1: Universal: Classroom Management: 80%

- Clear behavioral expectations
- Effective class-wide management strategies
- Universal behavior screening

Source: Groscne, M., & Volpe, R. J. (2013). Response-to-intervention (RTI) as a model to facilitate inclusion for students with learning and behaviour problems. *European Journal of Special Needs Education, 28*, 254-269. http://dx.doi.org/10.1080/08856257.2013.768452



*Tier 1: Core Instruction.* What are the elements of strong direct instruction that promote student success?







## MTSS: Tier 1: Core Instruction

 Strong core instructional practices are the foundation of MTSS. They underlie and strengthen classroom instruction.

When teachers are able successfully to teach across the **full range** of classroom ability levels, individualized **interventions** may not be needed.

Strong instruction includes making optimal use of instructional time, integrating direct-instruction elements into lessons, and providing accommodations & supports as appropriate.

## MTSS: Tier 1: Core Instruction: Direct • How the Common Core Works' Series @ 2013 Jim Wright Instruction

Teachers can strengthen their lessons by incorporating into them elements of direct instruction. Handout; pp. 2-3

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#### How To: Implement Strong Core Instruction

When teachers must present challenging academic material to struggling learners, they can make that material more accessible and promote faster learning by building assistance directly into instruction. Researchers use several terms to refer to this increased level of student instructional support: explicit instruction, direct instruction, supported instruction (Rosenshine, 2008).

The checklist below summarizes the essential elements of a supported-instruction approach. When preparing lesson plans, instructors can use this resource as a 'pre-flight' checklist to make sure that their lessons reach the widest range of diverse learners.

1. Increase Access to Instruction				
Instructional Element	Notes			
Instructional Match. Lesson content is appropriately matched to				
students' abilities (Burns, VanDerHeyden, & Boice, 2008).				
Content Review at Lesson Start. The lesson opens with a brief review				
of concepts or material that have previously been presented. (Burns,				
VanDerHeyden, & Boice, 2008, Rosenshine, 2008).				
Preview of Lesson Goal(a). At the start of instruction, the goals of the				
current day's lesson are shared (Rosenshine, 2008).				
Chunking of New Material. The teacher breaks new material into				
small, manageable increments, 'chunks', or steps (Rosenshine, 2008).				

#### Provided 'Scaffolding' Support nstructional Element Notes Detailed Explanations & Instructions. Throughout the lesson, the teacher provides adequate explanations and detailed instructions for all concepts and materials being taught (Burns, VanDerHeyden, & Boice, 2008). Think-Alouda/Talk-Alouda. When presenting cognitive strategies that cannot be observed directly, the teacher describes those strategies for students. Verbal explanations include 'talk-alouds' (e.g., the teacher describes and explains each step of a cognitive strategy) and 'thinkalouds' (e.g., the teacher applies a cognitive strategy to a particular problem or task and verbalizes the steps in applying the strategy) (Burns, VanDerHeyden, & Boice, 2008, Rosenshine, 2008) Work Models. The teacher makes exemplars of academic work (e.g. essays, completed math word problems) available to students for use as models (Rosenshine, 2008) Active Engagement. The teacher ensures that the lesson engages the student in 'active accurate responding' (Skinner, Pappas & Davis, 2005) often enough to capture student attention and to optimize leaming. Collaborative Assignments. Students have frequent opportunities to work collaboratively--in pairs or groups. (Baker, Gersten, & Lee, 2002; Gettinger & Seibert, 2002). Checks for Understanding. The instructor regularly checks for student understanding by posing frequent questions to the group (Rosenshine,

## How to: Implement Strong Core Instruction

1. Access to Instruction	2. 'Scaffolding' Support (Cont.)	
Instructional Match	Group Responding	
Content Review at Lesson Start	High Rate of Student Success	
Preview of Lesson Goal(s)	Brisk Rate of Instruction	
Chunking of New Material	□Fix-Up Strategies	
2. 'Scaffolding' Support	3. Timely Performance Feedback	
Detailed Explanations & Instructions	Regular Feedback	
Talk Alouds/Think Alouds	Step-by-Step Checklists	
General Work Models	4. Opportunities for Review/ Practice	
Active Engagement	□Spacing of Practice Throughout Lesson	
Collaborative Assignments	Guided Practice	
Checks for Understanding	Support for Independent Practice	
	Distributed Practice	

How to: Implement Strong Core Instruction						
1. A	Access to Instruction	2.	'Scaffolding' Support (Co	nt.)		
	tructional Match	□G	Group Responding			
□Co	Activity: Strong Direct		h Rate of Student Success			
□ <sup>Pre</sup> Instruction		sk Rate of Instruction				
□Ch	<ol> <li>Review this list of elements of direct instruction.</li> </ol>		Up Strategies	www.interventioncentral.org		
2.			imely Performance Feedback			
De	2. Select 1-2 of these elements	jular Feedback				
□Tal	<ul> <li>Tal that you find most challenging in whole-group instruction. Discuss possible</li> <li>Act ways to overcome these challenges.</li> <li>Co</li> </ul>		p-by-Step Checklists			
□Wc			pportunities for Review/ Practice			
			acing of Practice Throughout Lesson			
Co			ded Practice			
□Ch			port for Independent Practice			
Distributed Practice						



*Tier 1: Classroom Intervention*. How can teachers create, document, and implement academic intervention plans for specific students?





## RTI/MTSS for Academics: Pyramid of Interventions



Tier 2: Strategic

Tier 1: Classroom Academic Interventions Tier 1: Classroom Intervention. The classroom teacher provides Tier 1 interventions to those individual students with academic difficulties who need additional classroom support to achieve success in core instruction.

Tier 1: Core Instruction

# RTI Files...



Case 1: Jacqueline: 1<sup>st</sup> Grade: Letter Knowledge





## Case 2: Neda: 4<sup>th</sup> Grade: Math-Fact Fluency







# **RTI Files: Case 1**

Jacqueline Grade 1 **Problem:** Limited letter knowledge Intervention: Incremental Rehearsal



# **RTI Files: Case 1**

- **Problem:** Jacqueline cannot identify all mixed-case letters.
- Intervention: Her teacher, Mrs. Sampson, decides to use incremental rehearsal, a high-success intervention to help her to master all letter names. This intervention will be delivered 3 times per week in 12minute sessions—and will last for 6 weeks.



## Letter Names: Incremental Rehearsal

Step 1: The tutor writes down on a series of flash cards the letters that the student needs to learn.



## Response to Intervention Incremental Rehearsal of Letter Names

Step 2: The tutor reviews the letter identification cards with the student. Any card that the student can answer within 2 seconds is sorted into the 'KNOWN' pile. Any card that the student cannot answer within two seconds—or answers incorrectly—is sorted into the 'UNKNOWN' pile.



## Incremental Rehearsal of Letter Names

Step 3: The tutor is now ready to follow a nine-step incremental-rehearsal sequence: First, the tutor presents the student with a single index card containing an 'unknown' letter. The tutor reads the letter aloud, then prompts the student to read off the same unknown letter.



## Incremental Rehearsal of Letter Names

Step 3 (Cont.): Next the tutor takes a letter from the 'known' pile and pairs it with the unknown letter. When shown each of the two letters, the student is asked to identify it.



## Incremental Rehearsal of Letter Names

Step 3 (Cont.): The tutor then repeats the sequence--adding yet another known letter card to the growing deck of flash cards being reviewed and each time prompting the student to answer the whole series of letter names. This process continues until the review deck contains a total of one 'unknown' letter and eight 'known' letters (a high ratio of 'known' to 'unknown' material ).



## Incremental Rehearsal of Letter Names

Step 4: At this point, the last 'known' letter that had been added to the student's review deck is discarded (placed back into the original pile of 'known' items) and the previously 'unknown' letter name is now treated as the first 'known' letter in new student review deck for future drills.



## Incremental Rehearsal of Letter Names

Step 4: The student is then presented with a new 'unknown' letter to identifyand the review sequence is once again repeated each time until the 'unknown' letter is grouped with nine 'known' letters—and on and on. Daily review sessions are discontinued either when time runs out or when the student answers an 'unknown' letter incorrectly three times.



# **RTI Files: Case 1**

 Progress-Monitoring: During the intervention, Mrs. Sampson keeps a cumulative record of any additional letternames that Jacqueline masters, entering them on a log sheet.

At baseline, Jacqueline can identify 21 letters correctly. The outcome goal for Jacqueline is to name all 52 mixed-case letters accurately and quickly.



## **RTI Files: Case 1** Jacqueline: Grade 1: Incremental Rehearsal



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# RTI Files: Case 1: Take-Away

- Interventions are not...
  - an object ('flashcards')
  - a person ('the Reading Teacher')
  - a place ('The Learning Center').
- Instead, interventions are the actual instructional strategies/steps used to teach the struggling learner.
- So while 'flashcards' are not an intervention,
   'incremental rehearsal using mixed-case letter ID flashcards' is an intervention.

**RTI Files: Case 2** Neda Grade 4 **Problem:** Limited math-fact fluency Intervention: Cover-Copy-Compare



# **RTI Files: Case 2**

- **Problem:** Neda is slow in solving basic multiplication facts.
- Intervention: Neda's math teacher, Ms. Tanger, decides to use Cover-Copy-Compare (CCC), a student-directed strategy that relies on short-term memory retrieval to memorize math facts. The student will use CCC during daily deskwork.



## Cover-Copy-Compare: Math Facts

In this intervention to promote acquisition of math facts, the student is given a sheet with the math facts with answers. The student looks at each math model, covers the model briefly and copies it from memory, then compares the copied version to the original correct model (Skinner, McLaughlin & Logan, 1997).

Response	Worksheet: Cover-Copy-Compare s	Worksheet: Cover-Copy-Compare Student: Date:			
	Math Facts	Student Response			
	1. 9 x 7 = 63	1a.9 x 7 = 63			
		1b.			
	2. 9 x 2 = 18	2a.			
		2b.			
	<b>3.</b> $9 \times 4 = 36$	За.			
Covor Conv		3b.			
Cover-Copy-	$4.9 \times 1 = 9$	<b>4</b> a.			
Compare Math		4b.			
Fact Student	5. $9 \times 9 = 81$	<u>5</u> a.			
Workshaat		5b.			
VVUINSIICCI	6. $9 \times 0 = 34$	<u>6a.</u>			
	-0 y 3 - 27	6b.			
	$1.7 \times 3 - 21$	7a.			
	$0 \sqrt{5} - 45$	7b.			
	<b>8</b> 7 A J - 4J	8a.			
	$9 \times 10 = 90$	0u. Qa			
		9h.			
	$10.9 \times 8 = 72$	10a.			
		10b.			
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# **RTI Files: Case 2**

 Progress-Monitoring: Ms. Tanger will assess Neda's math-fact fluency once per week with a timed (2-minute) worksheet of randomly selected basic multiplication facts. The sheet will be scored for number of correct digits.

At **baseline**, Neda scores 28 correct digits/2 minutes. According to Grade 4 benchmark norms, the **outcome goal** after 6 weeks is for Neda to score at least 49 correct digits/2 minutes.



## RTI Files: Case 2 Neda: Grade 4: Math-Fact Fluency



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## RTI Files: Case 2: Take-Away

- Cover-Copy-Compare is an example of an intervention that is simple to use and to supervise.
- Schools can use a wide range of personnel to deliver interventions: classroom teachers, support staff (including teacher assistants/aides, adult volunteers, and cross-age (older) peer tutors—even parents!
- Interventions like Cover-Copy-Compare are perfect for non-instructional personnel to administer or oversee.

## RTI Files...



Case 1: Jacqueline: 1<sup>st</sup> Grade: Letter Knowledge





## Case 2: Neda: 4<sup>th</sup> Grade: Math-Fact Fluency











## RTI/MTSS for Academics: Pyramid of Interventions



Tier 2: Strategic

Tier 1: Classroom Academic Interventions Tier 2: Strategic Intervention (10-15%). Students with off-gradelevel skill deficits receive supplemental small-group interventions outside of core instruction to fill in those gaps. Interventions used are research-based.

Tier 1: Core Instruction

## Evaluating the Quality of Tier 2 Academic Interventions/Programs

High-quality Tier 2 interventions have these 4 important attributes. They:

- are supported by research.
- target off-grade-level academic skills to fill in gaps and catch the student up with grade peers.
- provide remediation in specific, clearly defined academic skills.
- are described in enough detail to allow interventionists to carry them out with fidelity.

Defining High-Quality Tier 2 Reading Interventions Example: HELPS (www.helpsprogram.org)

• HELPS (Helping Early Literacy with Practice Strategies) is a free tutoring program that targets student reading fluency skills.

Developed by Dr. John Begeny of North Carolina State University, the program is an evidence-based intervention package that includes several intervention elements in a 15-minute 1:1 tutorial session.

#### **HELPS Reading Fluency** Program www.helpsprogram.org LINK AVAILABLE ON CONFERENCE WEB PAGE



#### One-on-One Program Is Now Available!

Learn more about this program, such as which educators have used the program successfully, which students should benefit most from the program, and how educators can obtain the program and braining for free.

READ MORE

#### Strengths of One-on-One Program

Evidence-based and scientifically-validated

Requires no more than 10-12 minutes per day, 2-3 days

Has been successfully used with students of all different meding levels

Can be saaily integrated as part of a school's Response. to-Intervention (RTI) model

READ MORE

#### Importance of Reading Fluency

An extensive amount of reading research has confirmed that reading fluency is important for all students' reading development.

However, instructional strategies designed to im students' reading fluency are often missing from students'

READ MORE

#### Other HELPS Programs

At the present time, all materials for the HELPS One-on-One Program are eveilable for use

However, additional HELPS Programs are currently being developed, such as programs for small groups and Spenish-speaking students.

READ MORE

#### The HELPS Education Fund

The HELPS Education Fund is the non-profit foundation that is used to support teachers' free access to the HELPS Program materials.

This Fund is also used to support students' overall educational success, particularly for students from economically disedvortaged backgrounds. Through the HELPS Education Fund, togethers and achools can apply to receive free educational acrylocs. related to reading instruction. Teachers and schools can also apply for free educational materials beyond the free, downloadable materials offered from this webalt.

The HELPS Education Fund is financially supported in two ways. First, rather than downloading the HELPS Program materials for free from this website, teachers or achools can out to purchase a set of pre-casembled, professionally developed HELPS Program materials (for only \$45 per set). Second, individuals or organizations con make terreleductable donations directly to the Pund. 100% of proceeds from purchased HELPS materials and 100% of denotions to The HELPS Education Pund are used to improve educational outcomes for students.

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- The Education Trust
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- Resert journal publication about HELPS - Plot studies of small-group HEUPS

Program

Website Updates Posted on July 8, 2010 - HELPS motaliz improves in several NOT T

## HELPS: Tier 2 Reading-Fluency Program



Evaluating the Quality of Tier 2 Reading Interventions/Programs: Example: HELPS Program

Q: Does HELPS provide remediation in specific, clearly defined academic skills?

A: Yes. HELPS sessions include these research-based elements that target reading fluency:

- adult modeling of fluent reading.
- repeated reading of passages by the student.
- phrase-drill error correction.
- verbal cueing and retell check to encourage student reading comprehension.
- reward procedures to engage and encourage the student reader.

## Evaluating the Quality of Tier 2 Interventions/Programs

Here are 3 things that high-quality Tier 2 academic interventions are NOT:

- Homework help, test preparation, or reteaching of coreinstructional content.
- People. (The 'reading teacher' is not an intervention.)
- Locations. (The 'Learning Lab' or 'Academic Support Center' is not an intervention.)



Tier 3: Intensive Intervention: The RTI/MTSS Problem-Solving Team. When a student fails to respond to academic interventions at Tiers 1 and 2, what is the **Problem-Solving Process** at Tier 3?



## RTI/MTSS for Academics: Pyramid of Interventions

Tier 2: Strategic

Tier 3:

Intensive

Tier 1: Classroom Academic Interventions Tier 3: Intensive Intervention (1-5%). Students with intensive academic gaps are reviewed by the RTI/MTSS Problem-Solving Team and receive a customized intervention plan. Most students at Tier 3 are still general-education.

Tier 1: Core Instruction



## RTI Problem-Solving Team Roles

- Facilitator
- Recorder
- Time Keeper
- Case Manager
- Coordinator

#### Tier 3: RTI Team: Meeting Format

Introductions/Talking Points

- Step 1: Select Intervention Target(s)
- Step 2: Inventory Student's Strengths, Talents, Interests, Incentives
- **Step 3:** Review Background/Baseline Data
- Step 4: Set Academic and/or Behavioral Outcome Goals and Methods for Progress-Monitoring.
- **Step 5:** Design an Intervention Plan
- **Step 6:** Share RTI Intervention Plan With Parent(s)
- Step 7: Review the Intervention and Progress-Monitoring Plans



# *Pivot Points.* What are key classroom competencies that ANY student needs for school success?



The Struggling Student in a General-Education	
Setting: Pivot Points	



Directions. The student competencies in the table below represent 'pivot points'—opportunities for educators to support the at-risk student to 'pivot' them toward school success. Wumber in descending order the 5 competencies that you believe pose the greatest challenge for students in your classroom or school to attain.

Ranking	Student Competency
	A. Basic Academic Skills. The student has sufficient mastery of basic academic skills (e.g., reading fluency) to complete classwork.
	B. Academic Survival Skills. The student possesses the academic survival skills (e.g., homework skills, time management, organization) necessary to manage their learning.
	C. Work Completion. The student independently completes in-class work and homework.
	D. Transitions. The student flexibly adapts to changing academic routines and behavioral expectations across activities and settings (e.g., content- area classes; specials).
	E. Attentional Focus. The student has a grade- or age-appropriate ability to focus attention in large and small groups and when working independently.
	F. Emotional Control. The student manages emotions across settings, responding appropriately to setbacks and frustrations.
	G. Peer Interactions. The student collaborates productively and has positive social interactions with peers.
	H. Self-Efficacy. The student possesses a positive view of their academic abilities, believing that increased effort paired with effective work practices will result in improved outcomes ('growth mindset').
	<ol> <li>Self-Understanding. The student can articulate their relative patterns of strength and weakness in academic skills, general conduct, and social- emotional functioning.</li> </ol>
	J. Self-Advocacy. The student advocates for their needs and negotiates effectively with adults.

#### Handout p. 34

The Struggling Student in a General-Education Setting: Pivot Points

Successful students must be able to juggle many competencies simultaneously as they negotiate complex classroom demands.

The following slides present 10 such pivot points that include competencies in academics, behavior, self-management, and motivation.

Teachers can play an important role in supporting the struggling student by identifying potentially weak pivot points and assisting the learner to attain them.

### **Response to Intervention** Pivot Points: Strengthening the Student Skillset Basic academic skills **Emotional control** Academic Peer interactions 'survival skills' Work completion Self-efficacy Transitions Self-understanding Attentional focus Self-advocacy

### Pivot Points: The Struggling Student in a General Education Setting



Basic Academic Skills. The student has sufficient mastery of basic academic skills (e.g., reading fluency) to complete classwork.





 Academic Survival Skills. The student possesses the academic survival skills (e.g. homework skills, time management, organization) necessary to manage their learning.



### Pivot Points: The Struggling Student in a General Education Setting



 Work Completion. The student independently completes in-class work and homework.





Transitions. The student flexibly adapts to changing academic routines and behavioral expectations across activities and settings (e.g., content-area classes; specials).



### Pivot Points: The Struggling Student in a General Education Setting



Attentional Focus. The student has a grade- or age-appropriate ability to focus attention in large and small groups and when working independently.



 Emotional Control. The student manages emotions across settings, responding appropriately to setbacks and frustrations.

#### Pivot Points: The Struggling Student in a General Education Setting



. Peer Interactions. The student collaborates productively and has positive social interactions with peers.



Self-Efficacy. The student possesses a positive view of their academic abilities, believing that increased effort paired with effective work practices will result in improved outcomes ('growth mindset').

#### Pivot Points: The Struggling Student in a General Education Setting



Self-Understanding. The student
can articulate their relative
patterns of strength and weakness in
academic skills, general conduct, and socialemotional functioning.



**10. Self-Advocacy.** The student advocates for their needs and negotiates effectively with adults.



Piv	ot Points: The Struggling Student in a Gen	eral-	5-Minute 'Count Down' Timer	
Edu	ucation Setting: ACTIVITY		05:00	
1.	Basic Academic Skills. The student has sufficient mastery	y of	www.interventioncentral.org	
DIRECTIONS Review the 10 'nivot		sswork.		
poi	nts' discussed today.	demic survival skills (e.g., homework e their learning.		
		n-class work and homewo	ork.	
1. Select up to <b>3</b> that you find most challenging		mic routines and behavioral expectations ecials).		
chanchging.	priate ability to focus atte	ntion in large and		
2	Number those selected in order from			
۷.	greatest ('1') to least ('3') importance.	settings, responding ap	propriately to	
5		as positive social interactions with peers.		
3.	Be prepared to report out.	ir academic abilities, believing that It in improved outcomes.		
		e patterns of strength an tioning.	d weakness in	
10	Calf Adversery. The student adversets for their peeds and	no goti otop offectively wit		

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10. Self-Advocacy. The student advocates for their needs and negotiates effectively with adults.

#### Pivot Points: The Struggling Student in a General-Education Setting: ACTIVITY

05:00

- 1. Basic Academic Skills. The student has sufficient mastery of basic academic skills (e.g., reading fluency) to complete classwork.
- 2. Academic Survival Skills. The student possesses the academic survival skills (e.g., homework skills, time management, organization) necessary to manage their learning.
- 3. Work Completion. The student independently completes in-class work and homework.
- 4. **Transitions.** The student flexibly adapts to changing academic routines and behavioral expectations across activities and settings (e.g., content-area classes; specials).
- 5. Attentional Focus. The student has a grade- or age-appropriate ability to focus attention in large and small groups and when working independently.
- 6. Emotional Control. The student manages emotions across settings, responding appropriately to setbacks and frustrations.
- 7. Peer Interactions. The student collaborates productively, has positive social interactions with peers.
- 8. Self-Efficacy. The student possesses a positive view of their academic abilities, believing that increased effort paired with effective work practices will result in improved outcomes.
- **9. Self-Understanding.** The student can articulate their relative patterns of strength and weakness in academic skills, general conduct, and social-emotional functioning.
- 10. Self-Advocacy. The student advocates for their needs and negotiates effectively with adults.



*Identifying the Problem.* What process for describing academic problems can increase teachers' chances of finding interventions that work? pp. 4-6







## **Problem Identification: Activity**



**Describe the problem.** Think of a student currently or previously in your class whose academic problem(s) require significant amounts of your time, energy, and support. In 1-2 sentences, briefly describe the nature of that student's academic problem(s).



Academic Problem Identification: The Challenge...

Teachers benefit when they can describe clearly and accurately exactly what a student's academic problem is. Here is a simple approach that will:

- 'frame' the student problem as a 3-part 'problem ID' statement, and
- link that student problem to a likely cause.

Academic Problem Identification: 3 Steps pp. 4-6

Format the problem description as a 3-part problem-identification statement.

The process of writing this statement can help to make the **description** of the academic behavior more specific and also prompts the teacher to think about an appropriate performance **goal**.

## Academic Problem Identification: 3 Steps

- *1. Conditions.* Describe the environmental conditions or task demands in place when the academic problem is observed.
- 2. Problem Description. Describe the actual observable academic behavior with which the student has difficulty. If available, include specifics about student performance, such as rate of work, accuracy, or other relevant quantitative information.
- *3. Typical or Expected Level of Performance*. Provide a typical or expected performance criterion for this skill or behavior. Typical or expected academic performance can be calculated using a variety of sources, such as benchmark norms, local (classroom) norms, or expert opinion.

Conditions	Problem	Typical/Expected	
	Description	Level o	Class Norms
When shown flashcards with mixed-case letters for 3 seconds	Annika can name 38 of 52 correctly	while most peers in her class can name all letters correctly.	

## General Problem: *Annika doesn't know all of her letters.*

Conditions	Problem	Typic <sup>2</sup>	State/CC
	Description	Level	Standard
When asked to blend / segment onsets and rimes of single-syllable spoken words	Thomas (grade 1) is inconsistent in this skill	while this is a Kindergarten ELA/Reading standard.	

General Problem: *Thomas has limited phonics/alphabetics skills.* 

Conditions	Problem Description	Typical/Expected	
		Le Pe	Class Norms
When shown CVC words from all vowel families via flashcards	Terrance requires adult prompting, hints, and occasional direction to sound out and blend the words	while classmates perform the task with prompting only.	

General Problem: *Terrance still needs help in decoding CVC words.* 

Conditions Problem Description	Problem	Typical/Expected		
	Level o	Benchmark Norms		
When reading aloud from a 1- minute 4th-grade passage	Benjamin reads an average of 45 words	while the fall norm (20th percentile) at Grade 4 is 68 words per minute.		

# General Problem: *Benjamin is a slow reader.*

Conditions	Problem Typ Description Lev	Typical/Expected	
		Level o	Class Norms
When completing sets of 5 short- answer questions based on assigned readings	Neda scores an average of 40% (2 of 5 correct)	while classmates score an average of 80%.	

General Problem: *Neda does not retain important information from readings.*
Conditions	ditions Problem		Typical/Expected	
	Description	Leve	Entry-Level Skill	
When directed to match terms and definitions for 20 social-studies terms	Lucy can correctly match 10 items	wh lev a p the	ile this entry- el vocabulary is rerequisite for course.	

General Problem: *Lucy lacks basic socialstudies vocabulary.* 

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Conditions Problem		Туріо	cal/Expected
	Description	Leve	Class Norm
When working independently at her desk	Alice frequently seeks teacher help	wh cla abl the adu	ile most ssmates are e to complete task without ult support.

General Problem: *Alice is always seeking teacher help instead of working on her own.* 

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Conditions Problem		Typical/Expected		
	Description	Leve	Class Norm	
For science homework	Tye turns in assignments an average of 50% of the time	while the classroom median rate of homework turned in is 90%.		

## General Problem: *Tye isn't getting his homework in.*

Conditions	ons Problem		Typical/Expected	
	Description	Leve	Entry-Level Skill	
When completing an introductory- level algebra word problem	Ann is unable to translate that word problem into an equation with variables	wh in ł ma ski	ile most peers her class have stered this II.	

General Problem: *Ann can't set up her math word-problems.* 

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	Respon	<mark>co to l</mark> i	<u>atanyantian</u>		
		OS Data Co	lection: How to Monitor Classroom Interv	Jim Wright, Presenter entions © 2018 Jim Wright	www.interventioncentral.org
		Worl Class	sroom Academic Suppo	s RTI 'First Responder': ort Plans	How to Create
		Name:	Date:	inst	ructor: Jim Wright
		Use this	worksheet to apply concepts and try	out skills presented at today's training.	
		1.	Problem ID: Write a 3-part Problem academic problem in the form of a 3-	-Identification Statement. Use this or part Problem ID statement. For example	rganizer to write your student's les, see pp. 4-5 of handout:
	22	3-	Part Academic Problem ID Stateme	nt	
Handout, p.	32	Er Ta	wironmental Conditions or sk Demands	Problem Description	Typical or Expected Level of Performance
				-	
		2. H)	Problem ID: Write a Hypothesis St statement that pinpoints the likely 'ro possible hypotheses: (A) Skill Deficit Generalization Deficit (F) Escape/Aw ypothesis Statement	atement. Based on your knowledge of ot cause' of the academic problem. Se (B) Fluency Deficit; (C) Retention Defi oidance.	this student, write a 'hypothesis' e pp. 4-5 of handout for a listing of cit; (D) Endurance Deficit; (E)

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Classroom Support Plan Worksheet: Activity



Problem ID: Write a 3-part Problem-Identification Statement. Use this organizer to write your student's academic problem in the form of a 3-part Problem ID statement. For examples, see handout; pp. 4-5:

3-Part Academic Problem ID Statement						
Environmental Conditions or Task Demands	Problem Description	Typical or Expected Level of Performance				
		InterventionCentral 6-Minute 'Count Down' Timer 05:00 www.interventioncentral.org				
	www.interventioncentral.org	78				

## Academic Problem Identification: 3 Steps Choose a hypothesis for what is the most likely cause of the problem.



Academic Problems: Hypotheses & Recommendations (Adapted from the 'Instructional Hierarchy'; Haring et al., 1978; Martens et al, 2004)							
Hypothesis	Recommendation						
<ul> <li>Skill Deficit. The student has not yet acquired the skill(s).</li> </ul>	<ul> <li>Provide direct, explicit instruction to acquire the skill. Reinforce the student for effort and accuracy.</li> </ul>						

Sources: Haring, N.G., Lovitt, T.C., Eaton, M.D., & Hansen, C.L. (1978). The fourth R: Research in the classroom. Columbus, OH: Merrill.

Martens, B. K., & Witt, J. C. (2004). Competence, persistence, and success: The positive psychology of behavioral skill instruction. Psychology in the Schools, 41(1), 19-30.

Academic Problems: Hypoth (Adapted from the 'Instructional Hierarchy'; Haring	eses & Recommendations et al., 1978; Martens et al, 2004)
Hypothesis	Recommendation
<ul> <li>Fluency Deficit. The student has acquired the skill(s) but is not yet proficient.</li> </ul>	<ul> <li>Provide opportunities for the student to practice the skill and give timely performance feedback. Reinforce the student for fluency as well as accuracy.</li> </ul>

#### Academic Problems: Hypotheses & Recommendations (Adapted from the 'Instructional Hierarchy'; Haring et al., 1978; Martens et al, 2004)

## Hypothesis

- Retention Deficit.
   The student can acquire the skill(s) but has difficulty retaining it over an extended period.
- Give the student frequent opportunities for practice to entrench a skill and help the student to retain it over time. Begin by scheduling more numerous practice episodes within a short time ('massed review') to promote initial fluency and then strengthen longer-term skill retention by scheduling additional periodic review ('distributed review') across longer spans of several weeks or more.

#### Academic Problems: Hypotheses & Recommendations (Adapted from the 'Instructional Hierarchy'; Haring et al., 1978; Martens et al, 2004)

Hypothesis

- Endurance Deficit. The student can perform the academic task(s), but only for brief periods.
- Provide scaffolding supports to help the student to perform the academic task.
- In structuring lessons or independent work, gradually lengthen the period of time that the student spends in skills practice or use.
- Have the student self-monitor active engagement in skill-building activities-setting daily, increasingly ambitious work goals and then tracking whether he or she successfully reaches those goals.

#### Academic Problems: Hypotheses & Recommendations (Adapted from the 'Instructional Hierarchy'; Haring et al., 1978; Martens et al, 2004)

Hypothesis

- *Generalization Deficit.* The student possesses the skill(s) but fails to use across appropriate situations or settings.
- Enlist adults to prompt and remind the student to use the target skills when needed.
- Train the student to identify relevant characteristics of situations or settings when the skill should be used—and to selfmonitor skill use.
- Provide incentives (e.g., praise, rewards) for the student to use the skill in the appropriate settings.

## Academic Problems: Hypotheses & Recommendations

### Hypothesis

 Escape/Avoidance. The student seeks to escape or avoid the academic task. NOTE: This category includes "learned helplessness".

- Adjust the work to the student's ability level.
- Use scaffolding and accommodation strategies to make the academic work more manageable, e.g., breaking larger tasks into smaller increments ("chunking"), allowing the student to take brief breaks during work sessions, etc.

Dosnon	es to Intervention
Ксэрин	Jim Wright, Presenter 32
	🖓 Data Collection: How to Monitor Classroom Interventions © 2018 Jim Wright 🔰 www.interventioncentral.org
	We have a first the transformer DTUE of Descended the definition of
	Worksheet: The Teacher as RTI 'First Responder': How to Greate
	Classroom Academic Support Plans
	Name: Date: Instructor: Jim Wright
	Use this worksneet to apply concepts and try out skills presented at today's training.
	<ol> <li>Problem ID: Write a 3-part Problem-Identification Statement. Use this organizer to write your student's academic problem in the form of a 3-part Problem ID statement. For examples, see on 4-5 of bandout:</li> </ol>
	3.Dart Academic Droblem ID Statement
Handout n. 32	Environmental Conditions or Problem Description Typical or Expected Level of
nanacat, p. 02	Task Demands Performance
	2 Drohlam ID: Write a Hynothesis Statement, Based on your knowledge of this student, write a Avnothesis!
	statement that pinpoints the likely 'root cause' of the academic problem. See pp. 4-5 of handout for a listing of
	possible hypotheses: (A) Skill Deficit; (B) Fluency Deficit; (C) Retention Deficit; (D) Endurance Deficit; (E)
	Generalization Dericit (F) Escape/Avoldance.
	Hypothesis Statement

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## Classroom Support Plan Worksheet: Activity



InterventionCentr

05:00

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2. Problem ID: Write a Hypothesis Statement. Based on your knowledge of this student, write a 'hypothesis' statement that pinpoints the likely 'root cause' of the academic problem. See pp. 5-6 of handout for a listing of possible hypotheses: (A) Skill Deficit; (B) Fluency Deficit; (C) Retention Deficit; (D) Endurance Deficit; (E) Generalization Deficit (F) Escape/Avoidance.

#### Hypothesis Statement





## *Reading Interventions.* What are examples of elementary interventions in reading?







- 1. Phonemic Awareness: The ability to hear and manipulate sounds in words.
- 2. Alphabetic Principle: The ability to associate sounds with letters and use these sounds to form words.
- Five Components of Reading



- 3. Fluency with Text: The effortless, automatic ability to read words in connected text.
- 4. Vocabulary: The ability to understand (receptive) and use (expressive) words to acquire and convey meaning.
- 5. Comprehension: The complex cognitive process involving the intentional interaction between reader and text to convey meaning.

Source: Big ideas in beginning reading. University of Oregon. Retrieved September 23, 2007, from http://reading.uoregon.edu/index.php

## Kindergarten: Problem: "Erica has trouble connecting word sounds to their alphabetic equivalent."

## Intervention: Word Boxes/Word Sort

## Word Boxes & Word Sort

Young children must master phonics--the mapping of the sounds of speech to the symbols of the alphabet--before they can become accomplished readers.

Word boxes/word sort is a one-to-one intervention that can strengthen essential phonics skills through work on CVC words (Joseph, 2002).

## Word Boxes & Word Sort

Materials. To use word boxes and word sort, the teacher will need these additional materials:

- Word Boxes: Recording Form (attached)
- Word Boxes: Phonics Practice Sheet (attached)
- Word Sort: Practice Sheet (attached)
- Counters (e.g., pennies, poker chips)
- Moveable letters (e.g., magnet letters, cut-out letters)
- Markers for student use





#### Word Boxes: Recording Form

Date:

Student:

Interventionist

Directions: Write up to 10 words below to be reviewed using word boxes. Then use this form to record the student's performance in identifying the letter-sound components of the selected target words. The form has space for up to 3 trials for each word. Record 'Y' in a trial if the student is able to:

- 1. place a counter in each box of the word-box form while correctly stating the matching letter-sound.
- place the appropriate movable letter into each box of the word box form while correctly stating the matching letter-sound.
  - write the appropriate letter into each box of the word box form while correctly stating the matching lettersound.
  - pronounce the entire word as written in the word box form.

	WORD	Dete: Trial 1	Date: Trial 2	Date: Trial 3	NOTES
1		_Y_N	_Y_N	_Y_N	
2		_Y_N	_Y_N	_Y_N	
3		_Y_N	_Y_N	_Y_N	
4		_Y_N	_Y_N	_Y_N	
5		_Y_N	_Y_N	_Y_N	
6		_Y_N	_Y_N	_Y_N	
7		_Y_N	_Y_N	_Y_N	
8		_Y_N	_Y_N	_Y_N	
9		_Y_N	_Y_N	_Y_N	
10		_Y_N	_Y_N	_Y_N	

## Word Boxes: Recording Form

## Word Boxes & Word Sort

**Preparation**. The teacher selects up to 10 consonant-vowel-consonant (CVC) words each tutoring session and writes them into the *Word Boxes: Recording Form*.

The teacher also writes these 10 words onto index cards--one word per card. NOTE: These CVC words can be any mix from the five vowel groups: a,e,i,o,u.

W	Word Boxes: Recording Form							
Stud	Student: Date: Interventionist:							
<ul> <li>Directions: Write up to 10 words below to be reviewed using word boxes. Then use this form to record the student's performance in identifying the letter-sound components of the selected target words. The form has space for up to 3 trials for each word. Record 'Y' in a trial if the student is able to:</li> <li>1. place a counter in each box of the word-box form while correctly stating the matching letter-sound.</li> <li>2. place the emprendiate mayable letter into each box of the word box of the word box form while correctly stating the matching letter-sound.</li> </ul>								
3. <b>4.</b>	<ol> <li>prace the appropriate movable letter into each box of the word box form while correctly stating the matching letter-sound.</li> <li>write the appropriate letter into each box of the word box form while correctly stating the matching letter-sound.</li> <li>pronounce the entire word as written in the word box form.</li> </ol>							
	WORD	Date: Trial 1	Date: Trial 2	Date: Trial 3	NOTES			
1	pig	_Y_N	_Y_N	_Y_N				
2 <b>tan</b> _Y_N _Y_N _Y_N								
3	pot	_Y_N	_Y_N	_Y_N				



1. The teacher sounds out word and puts counters into word boxes. The teacher places counters under the blanks of the appropriate word box. The teacher next reads aloud a word from the CVC word list ('p-i-g'), sounds out each letter sound in the word, and slides a counter into the corresponding word box.



## Word Boxes & Word Sort

Part 1: Word Box: Procedures.

2. The teacher sounds out word and the student puts counters into word boxes. The teacher directs the student to put counters into the word boxes while the teacher pronounces the letter sounds of the CVC word.



3. The student sounds out word, puts letters into word boxes. The teacher lines up magnetic/cut-out letters for the target word under each of the appropriate blanks on the *Word Boxes: Phonics Practice Sheet*. The student sounds out each letter sound while sliding the letter counter into its word box.



4. The student writes letters of word into word boxes. The student is given a marker and directed to write the letters of the target word into the appropriate word boxes. The student is then prompted to read the word aloud.



5. [Optional] The teacher records student responses. The instructor may want to keep a record of student performance on the word-box activity—using the *Word Boxes: Recording Form.* 

**Directions:** Write up to 10 words below to be reviewed using word boxes. Then use this form to record the student's performance in identifying the letter-sound components of the selected target words. The form has space for up to 3 trials for each word. Record 'Y' in a trial if the student is able to:

- 1. **place** a **counter** in each box of the word-box form while correctly stating the matching letter-sound.
- place the appropriate movable letter into each box of the word box form while correctly stating the matching letter-sound.
- write the appropriate letter into each box of the word box form while correctly stating the matching lettersound.
- 4. pronounce the entire word as written in the word box form.

	WORD	Date: <u>11/7/</u> 17 Trial 1	Date: <u>Sam</u> e Trial 2	Date: <u>Sam</u> e Trial 3	NOTES
1	pig	Y <b>X</b> _N	<b>X</b> _Y _N	<b>_X</b> YN	Trial 1: R. needed prompts for steps 3,4.



## tan

pot

Part 2: Word Sort: Procedures.

Word Boxes & Word Sort

1. The student completes a word sort. At the end of the session, the student uses the Word Sort Practice Sheet to sort the word flashcards under their CVC 'family'. If a word is incorrectly sorted, the teacher points to that word and asks, "Is this word in the right place?"



# Grade 1: Problem: *"Karim needs to develop 'word attack' skills for CVC words."*

## Intervention: Letter Cube Blending

## Letter Cube Blending



 The Letter Cube Blending intervention targets alphabetic (phonics) skills. The student is given three cubes with assorted consonants and vowels appearing on their sides. The student rolls the cubes and records the resulting letter combinations on a recording sheet. The student then judges whether each resulting 'word' composed from the letters randomly appearing on the blocks is a real word or a nonsense word. The intervention can be used with one student or a group. (Florida Center for Reading Research, 2009; Taylor, Ding, Felt, & Zhang, 2011).

*Sources:* Florida Center for Reading Research. (2009). Letter cube blending. Retrieved from http://www.fcrr.org/SCAsearch/PDFs/K-1P\_036.pdfTaylor, R. P., Ding, Y., Felt, D., & Zhang, D. (2011). Effects of Tier 1 intervention on letter–sound correspondence in a Response-to-Intervention model in first graders. School Psychology Forum, 5(2), 54-73.

## Letter Cube Blending

**PREPARATION:** Here are guidelines for preparing Letter Cubes:

- Start with three (3) Styrofoam or wooden blocks (about 3 inches in diameter). These blocks can be purchased at most craft stores.
- With three markers of different colors (green, blue, red), write the lower-case letters listed below on the sides of the three blocks--with one bold letter displayed per side.
  - Block 1: t,c,<u>d</u>,<u>b</u>,f,m: green marker
  - Block 2: a,e,i,o.u,i (The letter / appears twice on the block.): blue marker
  - Block 3: <u>b,d</u>,m,n,r,s: red marker
- Draw a line under any letter that can be confused with letters that have the identical shape but a different orientation (e.g., <u>b</u> and <u>d</u>).

*Sources:* Florida Center for Reading Research. (2009). Letter cube blending. Retrieved from http://www.fcrr.org/SCAsearch/PDFs/K-1P\_036.pdf Taylor, R. P., Ding, Y., Felt, D., & Zhang, D. (2011). Effects of Tier 1 intervention on letter–sound correspondence in a Response-to-Intervention model in first graders. School Psychology Forum, 5(2), 54-73.

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## Letter Cube Blending

**INTERVENTION STEPS:** At the start of the intervention, each student is given a Letter Cube Blending Recording Sheet. During the Letter Cube Blending activity:

- 1. Each student takes a turn rolling the Letter Cubes. The student tosses the cubes on the floor, a table, or other flat, unobstructed surface. The cubes are then lined up in 1-2-3 (green: blue: red) order.
- 2. The student is prompted to sound out the letters on the cubes. The student is prompted to sound out each letter, to blend the letters, and to read aloud the resulting 'word'.

*Sources:* Florida Center for Reading Research. (2009). Letter cube blending. Retrieved from http://www.fcrr.org/SCAsearch/PDFs/K-1P\_036.pdfTaylor, R. P., Ding, Y., Felt, D., & Zhang, D. (2011). Effects of Tier 1 intervention on letter–sound correspondence in a Response-to-Intervention model in first graders. School Psychology Forum, 5(2), 54-73.

## Letter Cube Blending

#### INTERVENTION STEPS (Cont.):

- 3. The student identifies and records the word as 'real' or 'nonsense'. The student then identifies the word as 'real' or 'nonsense' and then writes the word on in the appropriate column on the Letter Cube Blending Recording Sheet.
- 4. The activity continues to 10 words. The activity continues until students in the group have generated at least 10 words on their recording sheets.

*Sources:* Florida Center for Reading Research. (2009). Letter cube blending. Retrieved from http://www.fcrr.org/SCAsearch/PDFs/K-1P\_036.pdfTaylor, R. P., Ding, Y., Felt, D., & Zhang, D. (2011). Effects of Tier 1 intervention on letter–sound correspondence in a Response-to-Intervention model in first graders. School Psychology Forum, 5(2), 54-73.
# Letter Cube Blending Sample Recording Sheet

*Sources:* Florida Center for Reading Research. (2009). Letter cube blending. Retrieved from http://www.fcrr.org/SCAsearch/PDFs/K-1P\_036.pdf

Taylor, R. P., Ding, Y., Felt, D., & Zhang, D. (2011). Effects of Tier 1 intervention on letter–sound correspondence in a Responseto-Intervention model in first graders. School Psychology Forum, 5(2), 54-73. How RTI Works' Series © 2011 Jim Wright

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Letter Cube Blending Activity (Florida Center for Reading Research, 2009)

Directions: Have the student toss the Letter Cubes. Line up the Cubes in GREEN-BLUE-RED (G-B-R) order. Have the student sound out each of the letters on the Cubes in G-B-R order. Have the student read the 'word' spelled out on the Cubes. Then have the student decide whether the 'word' is real or nonsense and write the word under the appropriate column below. Continue until at least 10 'words' have been generated by this group activity.

Student Name Carrie

Real Word	Nonsense Word
bar	dir
fun	

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Response

Grade 2: Problem: *"Luis needs to strengthen his sight-word vocabulary before he can move up to his next book."* 

Intervention: Reading Racetrack

# Reading Racetrack

- The teacher selects 28 words from a sight word list (e.g., Dolch, Fry) to create 'Reading Racetracks'.
- In one session, the student reads through four target Racetracks with 7 words each and one review Racetrack with all 28 words.
- The student reads words aloud from a 'Reading Racetrack' sheet for 1 minute.
- The student engages in repeated readings from that Racetrack wordlist until reaching a 90-word criterion or having read the list five times in a row.

Source: Rinaldi, L., Sells, D., & McLaughlin, T. F. (1997). The effect of reading racetracks on the sight word acquisition and fluency of elementary students. Journal of Behavioral Education, 7, 219-233.



Source: Rinaldi, L., Sells, D., & McLaughlin, T. F. (1997). The effect of reading racetracks on the sight word acquisition and fluency of elementary students. Journal of Behavioral Education, 7, 219-233.

#### **Response to Intervention**

How the Common (	Core Works' S	eries © 2014	Jim Wright	www.interventioncentral.org		4	
Reading R	acetra	ck Sco	re Sheet Studer	nt: Wordlis	t:	Da	ate:
TARGET LIST 1	#/Words Correct	#/Errors	Practice Words	TARGET LIST 3	#/Words Correct	#/Errors	Practice Words
First Read				First Read			
Second Read				Second Read			
Third Read				Third Read			
Fourth Read				Fourth Read			
Fifth Read				Fifth Read			

Source: Rinaldi, L., Sells, D., & McLaughlin, T. F. (1997). The effect of reading racetracks on the sight word acquisition and fluency of elementary students. Journal of Behavioral Education, 7, 219-233.

# Grade 3: Problem: *"Terrence is not a fluent reader."*

Interventions:

- Paired Reading
- Group-Based Repeated Reading

Classroom Academic Interventions: Reading Fluency
PAIRED READING: INCREASE READING FLUENCY. Teacher

and student begin the session reading aloud in unison.

During the session, at the student's choosing, he/she gives a silent signal (e.g., lightly tapping the teacher's wrist); at this signal, the teacher stops reading aloud and instead follows along silently while the student continues to read aloud. Whenever the student commits a reading error or hesitates for 3 seconds or longer (during either unison or independent reading), the teacher corrects the error and resumes reading in unison.

*Source:* Homan, S. P., Klesius, J. P, & Hite, C. (1993). Effects of repeated readings and nonrepetive strategies on students' fluency and comprehension. Journal of Educational Research, 87(2), 94-99.

### Group-Based Repeated Reading (Available on Conference Web Page)

An effective *group repeated reading intervention* (Klubnik & Ardoin, 2010) has been developed that allows a tutor to work on reading fluency with up to 3 students in a group format. This tutoring package includes several components, with repeated reading as the 'engine' that drives student growth in reading fluency. A tutoring session using this group intervention will last about 15 minutes.

### Group-Based Repeated Reading

**Preparation**. To prepare for each tutoring session, the tutor creates or obtains these materials:

1 student reading passage: This passage should be 150 words or longer and at students' instructional level.
 *Instructional* as defined here means that students are able to correctly read at least 90% of the words in the passage. Copies of the passage are made for each student and the tutor.

### Group-Based Repeated Reading

**Procedure.** The group repeated reading intervention has 4 components: passage preview, repeated readings, phrase-drill error correction, and contingent reward:

1. Passage Preview. The tutor reads the practice passage aloud once while students follow along silently, tracking their place with an index finger. During this initial readthrough, the tutor stops several times at unpredictable points and asks a student selected at random to read the next word in the passage. (NOTE: This 'assisted cloze' strategy -- Homan, Klesius, & Hite,1993--ensures that students pay close attention to the tutor's modeling of text.)

### Group-Based Repeated Reading

### Procedure.

*Repeated Readings.* The tutor next has the students read 2. the practice passage aloud 3 times. For each read-aloud, the students engage in sequential reading, with the process continuing in round-robin fashion until the passage is completed. When a student misreads or hesitates in reading a word for 3 seconds or longer, the tutor states the correct word. At the beginning of each repeated reading, the tutor selects a different student, to ensure that by the end of the 3 readings, each student will have read each sentence in the passage once.

### Response to Intervention Group-Based Repeated Reading

### Procedure.

*3. Phrase Drill Error Correction.* At the end of each reading, the tutor reviews error words (misreads or hesitations for 3 seconds or longer) with students. The tutor points to each error word, ensures that students are looking at the word, and asks them to read the word aloud in unison.

If students misread or hesitate for 3 seconds or longer, the tutor pronounces the error word and has students read the word aloud together (choral responding). Then the tutor has students read aloud a phrase of 2-3 words that includes the error word--performing this action twice.

# Grade 4: Problem: *"Malik doesn't closely monitor his understanding of what he reads."*

# Intervention: Click-or-Clunk

Reading Comprehension: Self-Management Strategies CLICK OR CLUNK: MONITORING COMPREHENSION

- The student continually checks understanding of sentences, paragraphs, and pages of text while reading.
- If the student understands what is read, he/she quietly says 'CLICK' and continues reading.
- If the student encounters problems with vocabulary or comprehension, he/she quietly says 'CLUNK' and uses a checklist to apply simple strategies to solve those reading difficulties.



Grade 4: Problem: *"Dominic struggles to retain the 'gist'/main ideas of informational passages."* 

Intervention:

Read-Ask-Paraphrase

Reading Comprehension: Self-Management Strategies

RETAIN TEXT INFORMATION WITH PARAPHRASING (RAP). ulletThe student is trained to use a 3-step cognitive strategy when reading each paragraph of an informational-text passage: (1) READ the paragraph; (2) ASK oneself what the main idea of the paragraph is and what two key details support that main idea; (3) PARAPHRASE the main idea and two supporting details into one's own words. This 3-step strategy is easily memorized using the acronym RAP (read-ask-paraphrase). OPTIONAL BUT RECOMMENDED: Create an organizer sheet with spaces for the student to record main idea and supporting details of multiple paragraphs—to be used with the RAP strategy-to be used as an organizer and verifiable work product.

*Source:* Hagaman, J. L., Casey, K. J., & Reid, R. (2010). The effects of the paraphrasing strategy on the reading comprehension of young students. Remedial and Special Education, 33, 110-123.



# Grade 5: Problem: "Neda 'gets lost' in difficult informational passages."

Intervention: Linking Pronouns to Referents

#### **Response to Intervention**

### Reading Comprehension 'Fix-Up' Skills: A Toolkit

Linking Pronouns to Referents (Hedin & Conderman, 2010). Some readers lose the connection between pronouns and the nouns that they refer to (known as 'referents')—especially when reading challenging text. The student is encouraged to circle pronouns in the reading, to explicitly identify each pronoun's referent, and (optionally) to write next to the pronoun the name of its referent. For example, the student may add the referent to a pronoun in this sentence from a biology text: "The Cambrian Period is the first geological age that has large numbers of multi-celled organisms associated with it Cambrian Period "

# Grade 6: Problem: *"Jeff often writes incomplete sentences."*

# Intervention: Sentence Combining

### Response to Intervention

### Sentence Combining (Online)

Students with poor writing skills often write sentences that lack 'syntactic maturity'. Their sentences often follow a simple, stereotyped format. A promising approach to teach students use of diverse sentence structures is through sentence combining.

In sentence combining, students are presented with kernel sentences and given explicit instruction in how to weld these kernel sentences into more diverse sentence types either

- by using connecting words to combine multiple sentences into one or
- by isolating key information from an otherwise superfluous sentence and embedding that important information into the base sentence.

Sources: Saddler, B. (2005). Sentence combining: A sentence-level writing intervention. *The Reading Teacher, 58,* 468-471.

Strong, W. (1986). *Creative approaches to sentence combining.* Urbana, OL: ERIC Clearinghouse on Reading and Communication Skill & National Council of Teachers of English.

### Formatting Sentence Combining Examples

 'Connecting words' to be used as a sentence-combining tool appear in parentheses at the end of a sentence that is to be combined with the base clause.

Example: Base clause: The car stalled. Sentence to be combined: The car ran out of gas. (because) Student-Generated Solution: The car stalled because it ran out of gas.

The element(s) of any sentence to be embedded in the base clause are underlined.

Example: Base clause: The economic forecast resulted in strong stock market gains. Sentence to be embedded: The economic forecast was <u>upbeat</u>. Student-Generated Solution: The upbeat economic forecast resulted in strong stock market gains.

Table 1: Sentence-combining	types and examples (Saddler, 2005; Strong, 1986)
Type of Sentence	Sentence Combining Example
Multiple (Compound) Sentence Subjects or Objects:	<ul> <li>Skyscrapers in the city were damaged in the hurricane.</li> <li><u>Bridges</u> in the city were damaged in the hurricane.</li> <li>Skyscrapers and bridges in the city were damaged in the</li> </ul>
Two or more subjects can be combined with a conjunction	humicane.
(e.g., or, and).	<ul> <li>When they travel, migratory birds need safe habitat.</li> <li>When they travel, migratory birds need regular supplies of</li> </ul>
Two or more direct or indirect objects can be combined with a conjunction (e.g., <i>or</i> , <i>and</i> ).	food. When they travel, migratory birds need safe habitat and regular supplies of food.
Adjectives & Adverbs: When a sentence simply contains an adjective or adverb that modifies the noun or verb of another sentence, the adjective or adverb from the first sentence can be	<ul> <li>Dry regions are at risk for chronic water shortages. <u>Overpopulated</u> regions are at risk for chronic water shortages. Dry and overpopulated regions are at risk for chronic water shortages.</li> </ul>
embedded in the related sentence.	<ul> <li>Health care costs have risen nationwide. Those health care costs have risen <u>quickly</u>. Health care costs have risen quickly nationwide.</li> </ul>

### **Response to Intervention**

Response to Intervention				
Table 1: Sentence-combining types and examples (Saddler, 2005; Strong, 1986)				
Type of Sentence Sentence Combining Example				
Connecting Words: One or	The house was falling apart.			
more sentences are combined	No one seemed to care. (but)			
with connecting words.	The house was falling apart, but no one seemed to care.			
Coordinating conjunctions (e.g.	The glaciers began to melt			
and but) link sentences on an	<ul> <li>The gradiers began to ment.</li> <li>The earth's average temperature increased (because).</li> </ul>			
equal basis.	The glaciers began to melt because the earth's average temperature increased.			
Subordinating conjunctions (e.g.,	Subordinating conjunctions (e.g.,			
after, until, unless, before, while,				
because) link sentences with one				
of the sentences subordinate or				
dependent on the other.				
Relative Clauses: Sentence	<ul> <li>The artist was the most popular in the city.</li> </ul>			
contains an embedded,	The artist painted watercolors of sunsets. (who)			
subordinate clause that modifies	The artist who painted watercolors of sunsets was the			
a noun.	most popular in the city.			
Appositives: Sentence contains	<ul> <li>The explorer paddled the kayak across the raging river.</li> </ul>			
two noun phrases that refer to the	The explorer was an expert in handling boats.			
same object. When two				
sentences refer to the same	The explorer, an expert in handling boats, paddled the			
noun, one sentence be reduced	kayak across the raging nver.			
in the other contains				
In the other sentence.				

## Websites with Research-Based Intervention Ideas for Elementary Classrooms

### Intervention Sources: WWC Practice Guides

• The What Works Clearinghouse is a federally sponsored site that includes a series of 'practice guides': summaries of current best practices in classroom instruction.

All guides are written for teachers and are free for download.



Intervention Sources: Florida Center for Reading Research

- This website is a product of a research center at Florida State University.
- The site includes free **lesson plans** for reading across grades K-5. (Many of the grade 4-5 resources are appropriate for secondary students with reading delays.)

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FLORI	DA (	JEN.	IEK	FOR	KEA	DING	RESI	LARCI	Н
	HOME	ABOUT	NEWS	PROJECTS	PEOPLE	RESOURCES	LIBRARY		
ARCH / RESOURCES /	STUDENT CENT	ER ACTIVITIES							
Stuc	lent	t Ce	ente	er A	ctivi	ties			
From 2004 to 2008, a team of teachers at FCRR collected ideas and created Student Center Activities for use fifth grade classrooms. Accompanying these Student Center Activities is a Teacher Resource Guide that offer differentiated instruction and how to use the Student Center materials.						use ffer			
Grades K-1	Student C	enter Acti	vities						
Grades 2-3 S	Student Co	enter Acti	vities						

#### **Response to Intervention**

Intervention Sources: Evidence-Based Intervention Network

- This site is co-sponsored by school psychology programs at East Carolina University and University of Missouri.
- It contains research-based ideas for reading, math, and behavior interventions.



Project Contributors

including evidence based intervention briefs, video modeling of EBIs, information on selecting and using EBI. Each of these resources has been developed in collaboration with faculty and students from a variety of universities. We hope you find the information useful to help children who are struggling.

### Classroom Reading/Writing Interventions

Lab Work: Select	on		
Review this list of	nk		
sample classroom reading/writing	Paraphrase		
intervention ideas.	nouns to Referents		
Select 1-2 ideas that you would MOST like			
to try in your classroom.	ombining		
Fluency			
<ul> <li>Paired Reading</li> </ul>			
<ul> <li>Group-Based Repeated Reading</li> </ul>			

<b>Classroom Reading/Writing Inter</b>	InterventionCentr <mark>al</mark> 5-Minute 'Count Down' Timer					
Phonics/Alphabetics	Comprehension	05:00				
<ul> <li>Word Boxes/Word Sort</li> </ul>	Click or Clunk	www.interventioncentral.org				
Incremental Rehearsal	Read-Ask-Paraphrase					
Letter Cube Blending	Linking Pronouns to F	<ul> <li>Linking Pronouns to Referents</li> </ul>				
Vocabulary	Writing					
Reading Racetrack	<ul> <li>Sentence Combining</li> </ul>					
Fluency						
<ul> <li>Paired Reading</li> </ul>						
<ul> <li>Group-Based Repeated Reading</li> </ul>						

www.interventioncentral.org

#### **Response to Intervention**





*Interventions: Collecting Data.* What are ways to collect data on classroom academic interventions?





Data Collection: H			· · · ·
	low to Monitor Classroom Interventions ⊗ 2016 Jim Wr	right	🔰 www.interventioncentral.org
Behavior Report Cards	A teacher-created rating scale that measures student classroom behaviors. A behavior report card contains 3-4 rating items describing goal behaviors. Each item includes an appropriate rating scale (e.g., Poor-Fair- Good). At the end of an observation period, the rater fills out the report card as a summary snapshot of the student's behavior.	•	General behaviors (e.g., complex with teacher requests; waits to be called on before responding) Academic 'enabling' behaviors (e.g., has all necessary work materials; writes down homework assignment correctly and completely, etc.)
Checklists	The dividing of a larger behavioral task or sequence into constituent steps, sub-skills, or components. Each checklist element is defined in a manner that allows the observer to make a clear judgment (e.g., YES/NO, COMPLETED/NOT COMPLETED) about whether the student is displaying it.	••••	Step-by-step cognitive strategies Behavioral routines Generalization: Target behavior carried out across settings
Cumulative Mastery Records	A cumulative record of the student's acquisition/mastery of a defined collection of academic items such as multiplication math facts. This record is updated after every intervention session.	•	Any discrete collection of academic items to be mastered: e.g., vocabulary, math facts, spelling words, letter or number names
Curriculum- Based Measures/ Assessment	A series of brief measures of basic academic skills given under timed conditions and scored using standardized procedures. CBMICBA measures often include research-derived benchmark norms to assist in evaluating the student's performance.	•	Speed and accuracy in basic academic skills: e.g., letter naming, number naming, number sense, vocabulary, oral reading fluency, readulary, oral reading fluency, readulary, oral reading (maze), production of writing, math fact computation
Grades	Represent in letter or number form the teacher's formal, summary evaluation of the student's academic performance on an assignment, quiz, test, or longer span of evaluation.	:	Homework grades Test grades Quarterly report card grades
Logs	Written adult or student entries that track the frequency (and perhaps additional details) of relevant academic performance and/or behaviors.	:	Homework completion Incidents of non-compliance Student record of dates when he or she uses a self-guided academic intervention. Listing of student-teacher meetings.
Rubrics	An instrument designed to measure a student on complex tasks. In a rubric, the teacher defines the categories that make up the important dimensions of a task, develops written exemplars representing mastery for each dimension, and creates a rating scale to be used in evaluating a particular student's work for each dimension.	•	Any complex, multi-dimensional task: e.g., participation in a discussion; writing a research paper; preparing and presenting a PowerPoint; completing and documenting a science lab project, etc.
Work	Student work that reflects performance on a	•	Work completion

### Handout pp. 19-21

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### Classroom Data Collection: The Basics...

Here are important guidelines: Tier 1/classroom data collection methods should:

- measure skill(s) targeted by the intervention. The teacher wants to know whether the student is improving specific academic skills or behaviors. The data-collection method is selected to track growth in that skill or behavior.
- **be sensitive to short-term gains**. Progress-monitoring should reveal in weeks—not months– whether the intervention is effective.
- **yield a specific number value**. The teacher selects progressmonitoring tool(s) that can be converted to numeric data—and charted.
- **include both baseline and goal**. Prior to the intervention, the teacher collects up to several data points to determine the student's baseline performance (starting point) and uses that information to calculate an outcome goal.

	Response to Intervention							
CI	Classroom Assessment Methods: Elementary							
1.	Archival Data	6.	Grades					
2.	Behavior Report Cards	7.	Logs					
3.	Checklists	8.	Rubrics					
4.	Cumulative Mastery Records	9.	Work Products					
5.	Curriculum-Based Measures/Assessment							

### Classroom Data Tool: Behavior Report Cards

 What It Is: A teacher-created rating scale that measures student classroom behaviors. A behavior report card contains 3-4 rating items describing goal behaviors. Each item includes an appropriate rating scale (e.g., Poor-Fair-Good). At the end of an observation period, the rater fills out the report card as a summary snapshot of the student's behavior.


# Classroom Data Tool: Behavior Report Card

• What It Can Measure:

General behaviors (e.g., complies with teacher requests; waits to be called on before responding)
 Academic 'enabling' behaviors (e.g., has all necessary work materials; writes down homework assignment correctly and completely, etc.)



	Response to Int	ervention				
	Curriculum-Based Measureme	nt: Behavior Rating Scales	Report Card Maker			
	Rod	ney: Behavior Re	oort Card			
	Student Name: Rodney	Date:				
Rohavior	Rater: Mrs. Smith	Classroor	n:			
Report Card	Directions: Review each of the Behavior Report Card items below. For each item, rate the degree to which the student showed the behavior or met the behavior goal.					
•	Rodney spoke respectfully and argument or complaint.	complied with Mr. Jones' r	equests within 1 minute wit	thout		
	Did	Did Rodney succeed in this behavior goal?				
		YES NO				
	Rodney remembered instruction	s and directions without n	eeding extra reminders.			
	The deg	ree to which Rodney met th	is behavior goal			
			$\odot$			
Rodney rememb	ered instructions and dir	ections without	needing extra rei	minders.		
	The degree to whi	ch Rodney met th	nis behavior goal			
	$(\Xi)$	$(\underline{\cdot})$	$\odot$			
	1	2	3			
	I have reviewed this completed Be	havior Report with my child.				
	Parent Signature:		Date:			
	Comments:					
		entral.org				

#### **Response to Intervention**

	Charler	e: Behavior Report Card
Behavior Report Card	Student Name: <u>Charlene</u> Rater: <u>Mr. Wright</u> Directions: Review each of the Bel degree to which the student showe Charlene brought all necessary wor	Date: Classroom: <u>Classroom 345</u> Phavior Report Card items below. For each item, rate the ed the behavior or met the behavior goal. <b>Item Materials to class.</b>
Charl	ene brought all necessary How wel	work materials to class.
		12
	I have reviewed this completed Behavi Parent Signature: Comments:	or Report with my child. Date:
		2

#### **Response to Intervention**

### Free Online App: Behavior Report Card Maker. Teachers can use this free app to create and download (in PDF format) customized Behavior Report Cards.

#### Behavior Report Card Maker If you have any suggestions or comments about this tool, please mail me. Roy's Report Card Switch to Expert Mode Save Save as... Start New Report Card Step 1 Enter the basic form information Behavior Report Cards are customized behavior rating forms that educators can use to evaluate the student's global behaviors on a daily basis or even more frequently. Use this application to create your own Behavior Report Card with rating items unique to the student that you are rating. Complete the fields below as the first step in creating your Behavior Report Card. Report card title 🙆 Person to fill out the report card @ Roy's Behavior Report Card Mr. Wright Directions @ Student's classroom 😰 Room 345 Review each of the Behavior Report Card items below. For each item, rate the Student's first and last name 🙆 degree to which the student showed the behavior or met the behavior goal. Rov Atkins Gender 🙆 male -Font family 🙆 san serif 💌 Font size 🙆 10 pt 💌 Append signature section @ Instructions for report card signer @ Person to sign the report card 🔞 I have reviewed this completed Behavior Parent Report with my child. Previous Next

# Classroom Data Tool: Checklist

• What It Is: The dividing of a larger behavioral task or sequence into constituent steps, sub-skills, or components.

Each checklist element is defined in a manner that allows the observer to make a clear judgment (e.g., YES/NO, COMPLETED/NOT COMPLETED) about whether the student is displaying it.



# Classroom Data Tool: Checklist

• What It Can Measure:

Step-by-step cognitive strategies
 Behavioral routines
 Generalization: Target behavior carried out across settings



### Checklist Example: Attending to Instruction

Checklist Item
WHEN THE TEACHER IS TALKING:
I am looking at the teacher.
I am not talking to other students.
I am sitting up straight.
I raise my hand and wait to be called on to comment or ask a question.
I ask questions if I don't understand what is being taught.
To avoid distracting myself or others, I do not play with objects at my desk.

#### ART ROOM HELPER CHECKLIST

Sharpen pencils.

Erase the board.

Check the floor for scraps.

- Collect supplies from tables.
- Wash dirty brushes.
- Test and throw away dry markers.

Checklist Example: 'Helper' Routine

# Classroom Data Tool: Checklist

Activity: Create Your Own Behavioral Checklist

- 1. Pick a task in your classroom that your student finds challenging, such as:
  - Getting organized at the start of class.
  - Completing an in-class independent assignment.
  - Participating in small-group discussion.
  - Cleaning up after an activity.
- 2. Write down the sequential steps that make up this larger task to create a behavioral checklist.



Free Online App: Self-Check Behavior Checklist Maker. This online tool allows teachers to define student behavior during classroom routines and transitions – a great way to clearly define behavioral expectations.

#### Self-Check Behavior Checklist Maker F Like Configure Tool View Outline Track Create customized checklists for students Self-Check Behavior Checklist Make to monitor their own classroom behaviors If you have any suggestions or comments about this tool, please mail me. Untitled Document Save Save as... Start New Checklist Self-Check Behavior Checklist Make Students who track their own behaviors gain greater control over those behaviors. Self-Check Behavior Checklist Maker is a free application that allows teachers to quickly create checklists that students can use to monitor their behavior in the classroom. Behavior checklists can be used to help both general-education and special-needs students to manage their behaviors in academically demanding and least-restrictive settings. (For suggestions on how to use behavior checklists, download How To: Improve Classroom Behaviors Using Self-Monitoring Checklists.) Click HERE to download the full Self-Check Behavior Checklist Maker manual. To browse student self-monitoring items, select any of the categories from the 'Select Checklist' drop-down



# Classroom Data Tool: Cumulative Mastery Record

• What It Is: A cumulative record of the student's acquisition/mastery of a defined collection of academic items such as multiplication math facts.

This record is updated whenever the student masters another academic item.



# Classroom Data Tool: Cumulative Mastery Record

- What It Can Measure:
  - Any discrete collection of academic items to be mastered, such as:
    - vocabulary terms/definitions
    - math facts
    - □ spelling words
    - Ietter or number names
    - □ sight words.





	Academic Ir	Academic Intervention: Cumulative Mastery Record					
	Student: Cumulative Mastery Record: During the i to use the 'criteria for mastery' defined on the	tudent: School Yr: Classroom/Course: umulative Mastery Record: During the intervention, record each mastered item below with date of mastery. NOTE: Be sure of use the 'criteria for mastery' defined on the first page of this form when judging whether the student has mastered a					
Mastery	Item 2: :	Date:	Item 21: : Item 22: :	Date:			
Cumulativa	Item 3: :	Date:	Item 23: : Item 24: :	Date:			
Mastery Record	Item 5: :	Date:	Item 25: : Item 26: :	Date:			
Form p.2	Hem 7: :	Date:	Item 27: :	Date:			
	Item 9: :	Date:	Item 29: : Item 30: :	Date: Date:			
	Item 12: :	Date:	Item 32: :	Date:			
	Item 14: : Item 15: :	Date:	Item 34: : Item 35: :	Date:			
	Item 16: : Item 17: :	Date:	Item 36: : Item 37: :	Date:			
	Item 18: :	Date:	Item 38: :	Date:	4		
	Item 20:	Date:	Item 40:	Date:	158		

**Cumulative Mastery Record: Steps**. Student progress on acquisition-stage goals can be measured using flashcards. Here are the steps:

• *STEP 1: Prepare flashcards.* Create a flashcard deck with all items in the collection that the student is working to master (e.g., letter-naming).

## Cumulative Mastery Record: Steps. STEP 2: Define mastery. Develop criteria to define mastery performance for any item:

EXAMPLE: Mastery Criteria: *When shown a letter, the student names it correctly within 3 seconds. The student is able to repeat this performance 3 times without error.* 



# Cumulative Mastery Record Form

	Academic Skills: Cumulative Mastery Record
	Student: Janey School Yr: 2017 Classroom/Course: Mrs. Winters, KDG
	Academic Item Set: Define the set of academic items to be measured (e.g., basic multiplication facts from 1-12; grade 1 sight- word list; vocabulary terms for biology course):
Let	tter-Naming: Mixed Case
	Criteria for Mastery: Describe the criteria for judging when the student has mastered a particular item from the academic item set. (Example: "A math fact is considered mastered when the student successfully answers that math-fact flashcard within 3 seconds on three successive occasions during a session and repeats this performance without error at the next session."):
Wh per	nen shown a letter, the student names it correctly within 3 seconds. The student is able to repeat this rformance 3 times without error.

#### Cumulative Mastery Record: Steps.

*STEP 3: Collect baseline data.* Conduct a baseline assessment to find out which items the student already knows. Show the student each flashcard and ask the student to respond. Use your mastery criteria to sort the cards into "known" and "unknown" piles.

In our example, if a student hesitates for longer than 3 seconds to identify a letter name, that flashcard is placed on the "unknown" pile.

Record the flashcard items that the student knows and the date of the baseline assessment.

# Cumulative Mastery Record Form

Baseline Skills Inventory: Prior to beginning the intervention, inventory the student's current level of mastery of the skill being measured. (NOTE: Apply the 'criteria for mastery' guidelines written above when completing the baseline skills inventory.)							
Person completing the inventory: Mrs. Winters Date Sept 23, 2017							
Item 1: a	Item 11: m	Item 21: D					
Item 2:	Item 12: r	Item 22: R					
Item 3: Z	Item 13: B	Item 23: O					

## Cumulative Mastery Record: Steps.

*STEP 4: Monitor progress.* During the acquisition intervention, periodically (e.g., weekly) review the flashcards with the student. Whenever the student masters an additional item (according to your mastery criteria), log the mastered item and date.



# Cumulative Mastery Record Form

Academic Intervention: Cumulative Mastery Record							
Student: Janey	Scho	ol Yr: 2017	Classroom/Course: Mr	s. Winters, <mark>K</mark> DG			
Cumulative Mastery Record: During the intervention, record each mastered item below with date of mastery. NOTE: Be sure to use the 'criteria for mastery' defined on the first page of this form when judging whether the student has mastered a							
particular item.							
Item 1: Q	Date: 9/28/17	Item 21:		Date:			
Item 2:: C	Date: 9/28/17	Item 22:		Date:			
Item 3: : J	Date: 9/28/17	Item 23:		Date:			
ltem 4∷ d	Date: 10/2/17	Item 24:		Date:			



Classroom Data Tool: Curriculum-Based Measurement/Assessment

• What It Is: A series of brief measures of basic academic skills given under timed conditions and scored using standardized procedures.

CBM/CBA measures often include research-derived benchmark norms to assist in evaluating the student's performance.



**Response to Intervention** 

Classroom Data Tool: Curriculum-Based Measurement/Assessment

• What It Can Measure:

□ Speed and accuracy in basic academic skills, such as:

□ letter naming: 1 min

□ number naming: 1 min

number sense: 1 min

• oral reading fluency: 1 min

□ reading comprehension (maze): 3 mins

D production of writing: 3 mins

□ math fact computation: 2 mins



#### Curriculum-Based Measures (CBMs)

CBM	Skill Area	Activity		
Letter Sound Fluency/Letter Name Fluency	Alphabetics/ Phonics	1 Minute: Student reads letter names or sounds from a randomly generated list.		
Oral Reading Fluency	Reading Fluency	1 Minute: Student reads aloud from a text passage.		
Reading Comprehension Fluency (Maze)	Reading Comprehension	3 Minutes: Student <b>reads silently</b> from a <b>Maze passage</b> and selects correct word in each choice item that restores meaning to the passage.		
Early Math Fluency	Number Sense	1 Minute: Student completes an Early Math Fluency probe: (1) Quantity Discrimination; (2) Missing Number; or (3) Number Identification		
Computation Fluency	Math Fact Fluency	2 Minutes: Student <b>completes math facts</b> and receives credit for each <b>correct digit</b> .		
Written Expression	Mechanics/ Conventions of Writing	4 Minutes: Student reads a story-starter (sentence stem), then produces a writing sample that can be scored for Total Words Written, Correctly Spelled Words, Correct Writing Sequences.		

Early Math Fluency: Measuring 'Number Sense'

• Early Math Fluency measures track primarygrade students' acquisition of number sense (defined as mastery of internal number line)





• Early Math Fluency: Quantity Discrimination [1 minute]: The student is given a worksheet with number pairs and, for each pair, identifies the larger of the two numbers.

Quantity Discrimination (QD): 1 Minute: The student is presented with pairs of numbers randomly sampled from 1-20 and must identify the larger number in each pair.

Grade	Fall QD (Chard et al., 2005)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Winter QD (Chard et al., 2005)	Winter: +/-1 SD (≈16th%ile to 84th%ile)	Spring QD (Chard et al., 2005)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth
K	15	8↔22	20	8↔32	23	12↔34	0.25
1	23	16↔30	30	21↔39	37	28↔46	0.44

Source: Chard, D. J., Clarke, B., Baker, S., Otterstedt, J., Braun, D., & Katz, R. (2005). Using measures of number sense to screen for difficulties in mathematics: Preliminary findings. Assessment for Effective Intervention, 30(3), 3-14.

Early Math Fluency: Missing Number [1 minute]: The student is given a worksheet with 4-digit number series with one digit randomly left blank and, for each series, names the missing number. 14
 16

Missing Number (MN): 1 Minute: The student is presented with response items consisting of 3 sequential numbers with one of those numbers randomly left blank. (Each 3-number series is randomly generated from the pool of numbers 1-20.) The student attempts to name the missing number in each series.

Grade	Fall MN (Chard et al.,	Fall: +/-1 SD (≈16th%ile to 84th%ile)	Winter MN (Chard et al., 2005)	Winter: +/-1 SD (≈16th%ile to 84th%ile)	Spring MN (Chard et al., 2005)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth
	2005)						
K	3	<mark>0</mark> ↔7	10	3↔17	14	7↔21	0.34
1	9	3↔15	17	11↔23	20	14↔26	<mark>0.3</mark> 4

Source: Chard, D. J., Clarke, B., Baker, S., Otterstedt, J., Braun, D., & Katz, R. (2005). Using measures of number sense to screen for difficulties in mathematics: Preliminary findings. Assessment for Effective Intervention, 30(3), 3-14.

• Early Math Fluency: Number Identification [1 minute]: The student is given a worksheet randomly generated numbers and reads off as many as possible within the time limit.

Number Identification (NID): 1 Minute: The student is presented with a randomly generated series of numbers ranging from 1-20 and names as many of those numbers aloud as time allows.

Grade	Fall NID (Chard et al., 2005)	Fall: +/-1 SD (≈16th%ile to 84th%ile)	Winter NID (Chard et al., 2005)	Winter: +/-1 SD (≈16th%ile to 84th%ile)	Spring NID (Chard et al., 2005)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth
K	14	0↔28	45	27↔63	56	38↔74	1.31
1	34	18↔50	53	36↔70	62	46↔78	0.88

Source: Chard, D. J., Clarke, B., Baker, S., Otterstedt, J., Braun, D., & Katz, R. (2005). Using measures of number sense to screen for difficulties in mathematics: Preliminary findings. Assessment for Effective Intervention, 30(3), 3-14.

#### Response to Int



The application to create CBM Early Math Fluency probes online

Quantity Discrimination (QD)

Numberfly Early Math Fluency Generator http://www.interventioncentral.org

Use this free online application to design and create Early Math Fluency Probes, including:

- Quantity Discrimination
- •Missing Number
- •Number Identification

		and the second second		
	Description: must verbally	The student identify the la	is given a sheet of n arger of the two valu	umber pairs and es for each pair.
org	Select the lowest be selected in the	t and <i>highest</i> nu e quantity-discrin	mbers to hination items:	2 2
5	FROM	0 -		TO 20 🔻
to	How many quanti	ify <mark>discriminatior</mark> items	i items should appear <i>in e</i>	ach row?:
	How many rows	of items should	appear on the student wor Submit	ksheet?:
	<ul> <li><u>QD Direction</u></li> <li>Discrimination</li> <li><u>QD Graph</u></li> <li>Discrimination</li> </ul>	<u>ns:</u> Download dir n probes, test sta Access a time-se n probes	ections for administering a atistics, & brief guidelines eries graph to chart studen	and scoring Quantity for use in an RTI process It progress using Quantity
		Missi	ng Number (M	IN)
	Description: 3- or 4-numb missing. The	The student er sequence student mus	is given a sheet that s. In each sequence st verbally identify the	contains a series of , one number is missing number.
	Select the lowest FROM	t and highest nu	mbers to be selected in th	e missing number items: TO 20 ▼
	How many missir	ng number items items	should appear in each ro	w?:
www.intervention	How many number	ers should appea items	r in each number series?	5

# Math Computation Fluency

 Students should have fluent recall of basicoperation math facts to prepare them for demanding math courses in middle and high school. **Response to Intervention** 

• Math Computation Fluency [2 minutes]: The student is given a math-fact worksheet and completes as many problems as possible. The worksheet is scored for number of correct digits.





SuperKids https://superkids.com/aweb/tools/ math/

Create free math computation worksheets customized to your students' goals.



educational tools > > > math

#### SuperKids Math Worksheet Creator

Have you ever wondered where to find math drill worksheets' problem, the maximum and minimum numbers to be used in t specifications, ready to be printed for use.

- <u>Addition</u>
- <u>Subtraction</u>
- Mixed Addition and Subtraction



ghts

# Mechanics & Conventions of Writing

• Tracking student growth in emerging writing skills can be confusing and time-consuming for teachers.

However, Curriculum-Based Measurement-Written Expression (CBM-WE) is an efficient, reliable method of formative student assessment that yields numeric indicators that are instructionally useful--such as total words written, correctly spelled words, and correct writing sequences.



Response	Curriculum-Based Measurement: Written Expression Probe				
	Student Name:	Classroon	n:Date:		
	One day, I was in my boat and a storm came up and carried me to a desert island. To survive				
CBM-Written Expression: Sample Story Starter					
Source: Writing Probe Generator. Available at http://www.interventioncentral.org/teacher- resources/curriculum-based-measurement-probes-writing	Tabel Wandar		0		
	Total Words: (	Correctly Spelled Words:	Correct Writing Seque	nc	

www.interve

**Response to Intervention** 

# CBM Writing Assessment: Scoring Total Words:

I woud drink water from the ocean and I woud eat the fruit off of the trees. Then I woud bilit a house out of trees, and I woud gather firewood to stay warm. I woud try and fix my boat in my spare time.



#### **Response to Intervention**

• **CBM-WE: Total Words Written** [4 Minutes]. The student's writing sample is scored for the total words written.

Total Words Written (TWW): This measure is a count of the total words written during the CBM-WE									
assessment.									
Grade	Fall	Fall:+/-1 SD	Spring	Spring: +/-1 SD	Weekly				
	TWW	(≈16th%ile to 84th%ile)	ŤWŴ	(≈16th%ile to 84th%ile)	Growth				
	(Malecki & Jewell,		(Malecki &		(Tadatada, 2011)				
	2003)		Jewell, 2003)						
1	8	3↔13	14	7↔21	0.45				
2	24	14↔34	31	19↔43	0.43				
3	36	23↔49	36	24↔48	0.35				
4	41	30↔52	46	30↔62	0.25				
5	51	34↔68	67	43↔91					
6	44	31↔57	58	44↔72					

Source: Gansle, K. A., VanDerHeyden, A. M., Noell, G. H., Resetar, J. L., & Williams, K. L. (2006). The technical adequacy of curric lumbased and rating-based measures of written expression for elementary school students. School Psychology Review, 35, 435-450.
# CBM Writing Assessment: Scoring Correctly Spelled Words:

I woud drink water from the ocean and I woud eat the fruit off of the trees. Then I woud bilit a house out of trees, and I woud gather firewood to stay warm. I woud try and fix my boat in my spare time.



• **CBM-WE: Correctly Spelled Words** [4 Minutes]. The student's writing sample is scored for the number of words spelled correctly.

Correctly Spelled Words (CSW): This measure is a count of correctly spelled words written during the CBM-WE assessment.

Grade	Fall	Fall:+/-1 SD	Spring	Spring: +/-1 SD	Weekly
	CSW	(≈16th%ile to 84th%ile)	CSW	(≈16th%ile to 84th%ile)	Growth
	(Malecki & Jewell,		(Malecki &		(Tadatada, 2011)
	2003)		Jewell, 2003)		
1	5	1↔9	10	3↔17	0.45
2	20	10↔30	27	15↔39	0.46
3	32	19↔45	33	21↔45	0.37
4	38	26↔50	44	29↔59	0.26
5	48	31↔65	65	42↔88	
6	42	29↔55	56	41↔71	

Source: Gansle, K. A., VanDerHeyden, A. M., Noell, G. H., Resetar, J. L., & Williams, K. L. (2006). The technical adequacy of curric lumbased and rating-based measures of written expression for elementary school students. School Psychology Review, 35, 435-450.

CBM Writing Assessment: Scoring Correct Writing Sequences: I woud drink water from the ocean and woud eat the fruit off of the trees. Then I woud bilit a house out of trees, and I woud gather firewood to stay warm. I woud try and fix my boat in my spare time.

Correct Writing Sequences = 37

 CBM-WE: Correct Writing Sequences [4 Minutes]. A point is scored whenever two adjacent units of writing (e.g., two words appearing next to each other) are correct in punctuation, capitalization, spelling, and syntactical and semantic usage.)

Correct Writing Sequences (CWS): This measure is a tabulation of correct 'writing sequences' written during the CBM-WE assessment. One Correct Writing Sequence is scored whenever two adjacent units of writing (e.g., two words appearing next to each other) are found to be correct in their punctuation, capitalization, spelling, and syntactical and semantic usage.

Grade	Fall	Fall:+/-1 SD	Spring	Spring: +/-1 SD	Weekly
	CWS	(≈16th%ile to 84th%ile)	CWS	(≈16th%ile to 84th%ile)	Growth
	(Malecki & Jewell,		(Malecki &		(Tadatada, 2011)
	2003)		Jewell, 2003)		
1	2	0↔4	7	1↔13	0.36
2	15	5↔25	24	11↔37	0.44
3	28	14↔42	31	18↔44	0.35
4	38	25↔51	42	26↔58	0.22
5	46	28↔64	63	40↔86	
6	41	27↔55	54	37↔71	

Source: Gansle, K. A., VanDerHeyden, A. M., Noell, G. H., Resetar, J. L., & Williams, K. L. (2006). The technical adequacy of curric lumbased and rating-based measures of written expression for elementary school students. School Psychology Review, 35, 435-450.

### Writing Probe Generator

	Home Academic Interventions Behavior Interventions Products Workshops CBM Downloads RTI Help Contact
	Writing Probe Generator
Vriting Probe Generator	Response to Intervention Track, Document, Monitor & Menage RTI Data Made Easy www.RTImDinactaom Intervention Specialist Family Addiction Intervention. Don't well for bottom: Intervention 2008 200 2008 200 2008 (a) Family Partmenenton and Complete Solution for RTI Benchmark and Targetes Assessments Online or Paper, Districtivite www.aduktisamaning.com Common Core Addivities Online Tests, Lessons, and More: Reading, Writing, Meth Content www.aduktisamaning.com         Written Expression Probe Generator         Curriculum-Based Measurement Written Expression probes are brief, fined (4-minute) assessments that look at a student's mastery of writing mechanics and convertions. The student is given a 'story starter', a brief introductory story stem that serves as a stimulus for the student to create his or her own writing sample.         Written expression probes can be used at any practice are still working on such writing writing writing assessments
Create a probe to assess the mechanics and conventions of student writing.	<ul> <li>Writen Expression process can be used at any group even in working on such writing process of such writing skin as purchashor, grammar, administering and scoring CBM Writen Expression probes by cloking <u>here</u>.</li> <li>Directions: You can use this application to generate your own custom CBM Writen Expression Story Starter to use immediately with your student (a). Just follow these steps:</li> <li>Select a title [optional]. You can give your story starter sheet a custom title (e.g., 'Jim's Writing Sample: October 24, 2011') by typing your title into the textbox. 'Select a title for this worksheet' below.</li> <li>Select or write a story starter. Enter a story starter of your choosing into the textbox. 'Type in the story starter' below. Of course, you can write your own story starter. Crive an off you to edit as needed.</li> <li>Download and view the Writing Probe Sheet. When you have finished formatting your writing probe, you can download and view it in pdf format by clicking on the 'Download PDP' button and following directions to email your finished Writing Probe Sheet to whomever you choose by clicking on the 'Email PDP' button and following directions to email your finished Writing Probe Sheet to whomever you choose by clicking on the 'Email PDP' button and following directions to enter your own email address as well as that of the intended recipient.</li> </ul>
	Select a title for this worksheet (optional) Type in the 'story starter' The sockseper noticed that the coge was open and Click on the 'story starter' you wish to use.

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#### **Response to Intervention**

How to Track Classroom Reading Interventions

Review methods of classroom data collection (pp. 19-21). Select **1-2** methods you would like to use (or use more often) in your classroom.

10:00 www.interventioncentral.org Jim Wright, Presente Data Collection: How to Monitor Classroom Interventions @ 2016 Jim Wright 🗳 www.interventioncentral.org Classroom Data Tools: What Are They and What Can They Measure? When a teacher wants to monitor a student's progress on a classroom academic intervention, the instructor will (1) decide what data 'channel' to use to collect that data, and then (2) select a data tool designed to capture the desired information. Here are those steps: Step 1: Select a Data 'Channel'. While there are many ways to collect data to monitor student academic performance, virtually all information is gathered through one of four general 'data channels': direct observation, interviews, work products, or self-monitoring. Direct observation. The evaluator watches the student engaged in the academic task and records significant behaviors observed during that observation. Interviews. The evaluator talks with the student and/or adults familiar with the student to collect useful information about the student's academic performance. Work products. The evaluator reviews completed student work (e.g., in-class or homework assignments, guizzes and tests, etc.) to draw conclusions about that student's academic performance. · Self-monitoring. The student collects information about his or her own academic performance and shares that data with the evaluator. The four channels described here give teachers access to vital information on student performance. However, it is likely that the data the teacher collects across multiple situations will be highly variable and subjective-unless that instructor makes an effort to collect information in a structured, consistent format over time For example, a teacher might observe a student weekly during independent work to monitor whether the learner is consistently applying all steps of an academic strategy. If the teacher simply jots down random notes during these observations, the information collected will probably vary considerably across time, depending on what the teacher decides to include in his notes on any given day. If instead, however, the teacher uses a checklist that includes the essential steps in the academic strategy, that instructor's observations are far more likely to record accurately and consistently what steps in the strategy the student actually uses. Checklists, rubrics, and other tools can transform information collected via observation, interviews, work products, or self-monitoring into objective formative data that can be charted over time to track the outcomes of classroom interventions. Step 2: Select a Data Tool. Teachers have a variety of tools that they can access to collect behavioral or academic information and monitor classroom interventions. This 'look-up' chart provides a review of the most common data sources and what they can measure: Data Tool What It is What It Can Measure Archival Data Existing data routinely collected by schools Attendance

that provides useful ongoing information about the student's academic or behavioral performance.	:	Office disciplinary referrals Other aspects of behavior or academic performance captured in the school database
--------------------------------------------------------------------------------------------------------	---	--------------------------------------------------------------------------------------------------------------------------



How to individualize instruction. What are ideas to differentiate/ scaffold instruction for academic success?







## Interventions, Instructional Adjustments & Modifications: Sorting Them Out (Handout; p. 7)

- Academic Intervention. An *academic intervention* is a strategy used to teach a new skill, build fluency in a skill, or encourage application of an existing skill to new situations or settings. Example: Read-Ask-Paraphrase.
- Instructional Adjustment/ Accommodation. An *instructional adjustment* (also known as an 'accommodation') helps the student to fully access and participate in the general-education curriculum without changing the instructional content or reducing the student's rate of learning. Examples: Chunking larger tasks into smaller sub-tasks; keyboarding a writing assignment in lieu of handwriting.
- Modification. A *modification* changes the expectations of what a student is expected to know or do—typically by lowering the academic standards against which the student is to be evaluated. Example: Open book test for one.

Differentiation vs. Scaffolding: Two Kinds of Support Differentiation & scaffolding share similarities. Both require individualization and are used to increase student engagement and academic success. However, they also differ...



*Source:* Alber, R. (2014). 6 scaffolding strategies to use with your students. Edutopia. Retrieved from https://www.edutopia.org/blog/scaffolding-lessons-six-strategies-rebecca-alber

Free Online App: Accommodations Finder. Browse this app for ideas on how to provide classroom accommodations for groups or individuals.



https://www.interventioncentral.org/teacher-resources/learningdisability-accommodations-finder



- 1. Go to the workshop page.
- 2. Browse the ideas in the Accommodations Finder app.
- 3. Locate at least 1 accommodation strategy that you might want to use with your student(s).
- 4. [Optional] Download your selected strategy.



# *Math Interventions.* What are practical math interventions to support struggling learners?





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<b>Computing.</b> Carrying out mathematical procedures, such as adding, subtracting, multiplying, and dividing numbers flexibly, accurately, efficiently, and appropriately.
Applying. Being able to formulate problems mathematically and to devise strategies for solving them using concepts and procedures appropriately.
<b>Reasoning.</b> Using logic to explain and justify a solution to a problem or to extend from something known to something less known.
<b>Engaging.</b> Seeing mathematics as sensible, useful, and doable—if you work at it—and being willing to do the work.

Grade 1: Problem: *"Ricky cannot rapidly access values between 1 and 10 (number line)."* 

# Intervention: Building Number Sense Through a Counting Board Game

**DESCRIPTION:** The student plays a number-based board game to build skills related to 'number sense', including number identification, counting, estimation skills, and ability to visualize and access specific number values using an internal number-line (Siegler, 2009).

### MATERIALS:

- Great Number Line Race! form
- Spinner divided into two equal regions marked "1" and "2" respectively. (NOTE: If a spinner is not available, the interventionist can purchase a small blank wooden block from a crafts store and mark three of the sides of the block with the number "1" and three sides with the number "2".)

The Great Nun	ıber-L	ine Ra	ace!	0					
s t r t	3		5	6	7	8	9	10	
Date: Directions:Mark the winnerfo Players Game 1	Start T preach gan Gam	Time: me with an ' e 2	_: 'X' in the ta Game 3	End Time: ble below. Game	4 G	ame 5	Game 6	Ga	me 7
1:							- /		2

Source: Siegler, R. S. (2009). Improving the numerical understanding of children from low-income families. Child Development Perspectives, 3(2), 118-124.

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4

**INTERVENTION STEPS:** A counting-board game session lasts 12 to 15 minutes, with each game within the session lasting 2-4 minutes. Here are the steps:

1. Introduce the Rules of the Game. The student is told that he or she will attempt to beat another player (either another student or the interventionist). The student is then given a penny or other small object to serve as a game piece. The student is told that players takes turns spinning the spinner (or, alternatively, tossing the block) to learn how many spaces they can move on the Great Number Line Race! board.

Each player then advances the game piece, moving it forward through the numbered boxes of the game-board to match the number "1" or "2" selected in the spin or block toss. Source: Siegler, R. S. (2009). Improving the numerical understanding of children from low-income families. Child Development

**INTERVENTION STEPS:** A counting-board game session lasts 12 to 15 minutes, with each game within the session lasting 2-4 minutes. Here are the steps:

1. Introduce the Rules of the Game (cont.).

When advancing the game piece, the player must call out the number of each numbered box as he or she passes over it. For example, if the player has a game piece on box 7 and spins a "2", that player advances the game piece two spaces, while calling out "8" and "9" (the names of the numbered boxes that the game piece moves across during that turn).

**INTERVENTION STEPS:** A counting-board game session lasts 12 to 15 minutes, with each game within the session lasting 2-4 minutes. Here are the steps:

- 2. Record Game Outcomes. At the conclusion of each game, the interventionist records the winner using the form found on the *Great Number Line Race!* form. The session continues with additional games being played for a total of 12-15 minutes.
- *3. Continue the Intervention Up to an Hour of Cumulative Play.* The counting-board game continues until the student has accrued a total of at least one hour of play across multiple days. (The amount of cumulative play can be calculated by adding up the daily time spent in the game as recorded on the Great Number Line Race! form.)

The Great Nun	ıber-L	ine Ra	ace!	0					
s t r t	3		5	6	7	8	9	10	
Date: Directions:Mark the winnerfo Players Game 1	Start T preach gan Gam	Time: me with an ' e 2	_: 'X' in the ta Game 3	End Time: ble below. Game	4 G	ame 5	Game 6	Ga	me 7
1:							- /		2

Source: Siegler, R. S. (2009). Improving the numerical understanding of children from low-income families. Child Development Perspectives, 3(2), 118-124.

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4

# Grade 3: Problem: *"Janice is not fluent in her addition math facts."*

# Intervention: Classwide Math Peer Tutoring



## Peer Tutoring in Math Computation with Constant Time Delay

## Peer Tutoring in Math Computation with Constant Time Delay

 DESCRIPTION: This intervention employs students as reciprocal peer tutors to target acquisition of basic math facts (math computation) using constant time delay (Menesses & Gresham, 2009; Telecsan, Slaton, & Stevens, 1999). Each tutoring 'session' is brief and includes its own progress-monitoring component--making this a convenient and time-efficient math intervention for busy classrooms.

## Peer Tutoring in Math Computation with Constant Time Delay

### MATERIALS:

*Student Packet:* A work folder is created for each tutor pair. The folder contains:

- 10 math fact cards with equations written on the front and correct answer appearing on the back. NOTE: The set of cards is replenished and updated regularly as tutoring pairs master their math facts.
- □ Progress-monitoring form for each student.
- Pencils.

Peer Tutoring in Math Computation with Constant Time Delay

**Tutoring Activity.** Each tutoring 'session' last for 3 minutes. The tutor:

- *Presents Cards*. The tutor presents each card to the tutee for 3 seconds.
- *Provides Tutor Feedback*. [When the tutee responds correctly] The tutor acknowledges the correct answer and presents the next card.

[When the tutee does not respond within 3 seconds or responds incorrectly] The tutor states the correct answer and has the tutee repeat the correct answer. The tutor then presents the next card.

- *Provides Praise*. The tutor praises the tutee immediately following correct answers.
- Shuffles Cards. When the tutor and tutee have reviewed all of the math-fact carts, the tutor shuffles them before again presenting cards.

Peer Tutoring in Math Computation with Constant Time Delay

- **Progress-Monitoring Activity**. The tutor concludes each 3-minute tutoring session by assessing the number of math facts mastered by the tutee. The tutor follows this sequence:
  - *Presents Cards.* The tutor presents each card to the tutee for 3 seconds.
  - *Remains Silent*. The tutor does not provide performance feedback or praise to the tutee, or otherwise talk during the assessment phase.
  - Sorts Cards. Based on the tutee's responses, the tutor sorts the math-fact cards into 'correct' and 'incorrect' piles.
  - Counts Cards and Records Totals. The tutor counts the number of cards in the 'correct' and 'incorrect' piles and records the totals on the tutee's progress-monitoring chart.

## Peer Tutoring in Math Computation: Score Sheet

kesponse to inter	VEILIUIT					
Math Tutoring: So	core Sheet					
Tutor 'Coach': Tutee 'Player':						
Directions to the Tutor: Write down the number of math-fact cards that your partner answered correctly and the number answered incorrectly.						
Date:	Cards Correct Cards Incorrect					
Date:	Cards Correct Cards Incorrect					
Date:	Cards Correct Cards Incorrect					
Date:	Cards Correct: Cards Incorrect					
Date:	Cards Correct Cards Incorrect					
Date:	Cards Correct Cards Incorrect					
Date:	Cards Correct Cards Incorrect					
Date:	Cards Correct	Cards Incorrect				

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### Peer Tutoring in Math Computation with Constant Time Delay

**Tutoring Integrity Checks.** As the student pairs complete the tutoring activities, the supervising adult monitors the integrity with which the intervention is carried out. At the conclusion of the tutoring session, the adult gives feedback to the student pairs, praising successful implementation and providing corrective feedback to students as needed. NOTE: Teachers can use the attached form *Peer Tutoring in Math Computation with Constant Time Delay: Integrity Checklist* to conduct integrity checks of the intervention and student progress-monitoring components of the math peer tutoring.

Peer Tutoring in Math Computation with Constant Time Delay: Integrity Checklist

Tutoring Session: Intervention Phase

Directions: Observe the tutor and tutee for a full intervention session. Use this checklist to record whether each of the key steps of the intervention were correctly followed.

Peer Tutoring in	the key steps of the intervention were correctly followed.				
Math	Correctly Carried Out?	Step	Tutor Action	NOTES	
Computation:	YN	1.	Promptly Initiates Session. At the start of the timer, the tutor immediately presents the first math-fact card.		
Intervention	YN	2.	Presents Cards. The tutor presents each card to the tutee for 3 seconds.		
Integrity Sheet: (Part 1: Tutoring	YN	3.	Provides Tutor Feedback. [When the tutee responds correctly] The tutor acknowledges the correct answer and presents the next card. [When the tutee does not respond within 3 seconds or responds incorrectly] The tutor states the correct answer and has the tutee repeat the correct answer. The tutor then presents the next card.		
Activity)	YN	4.	Provides Praise. The tutor proises the tutee immediately following correct answers.		
	YN	5.	Shuffles Cards. When the tutor and tutee have reviewed all of the math-fact carts, the tutor shuffles them before again presenting cards.		
	YN	6.	Continues to the Timer. The tutor continues to presents math-fact cards for tutee response until the timer rings.		

Peer Tutoring in	Tutoring Session: Assessment Phase Directions: Observe the tutor and tutee during the progress-monitoring phase of the session. Use this checklist to record whether each of the key steps of the assessment were correctly followed.					
Math						
Computation:	Correctly Carried Out?	Step	Tutor Action	NOTES		
Intervention	YN	1.	Presents Cards. The tutor presents each card to the tutee for 3 seconds.			
Integrity Sheet	YN	2.	Remains Silent. The tutor does not provide performance feedback or praise to the tutee, or otherwise talk during the assessment phase.			
(Part 2:	YN	3.	Sorts Cards. The tutor sorts cards into 'correct' and 'incorrect' piles based on the tutee's responses.			
Progress- Monitoring)	YN	4.	Counts Cards and Records Totals. The tutor counts the number of cards in the 'correct' and 'incorrect' piles and records the totals on the tutee's progress-monitoring chart.			

Grade 4: Problem: *"Ally is inconsistent when setting up and solving math word problems."* 

# Intervention: STAR Math Problem-Solving Strategy

## STAR: Improving Performance on Math Word Problems

Students can improve their performance on math word problems when they follow STAR, a simple 4-step selfguided strategy.

STAR is easy to recall and prompts the student to apply problem-solving steps in a logical order. It was found to be particularly effective with students with emotional/behavioral disorders.

Source: Peltier, C., & Vannest, K. J. (2016). Utilizing the STAR strategy to improve the mathematical problem-solving abilities of students with emotional and behavioral disorders. Beyond Behavior, 25(1), 9-15.

Step	What I Do	STAR: Solving			
Search	<ul> <li>I search the problem for important information by:</li> <li>reading it aloud</li> <li>highlighting key words</li> </ul>	Math Word Problems: 4-Step Strategy			
Translate	<ul> <li>crossing out information that is not important.</li> <li>I translate the word problem into a number sentence. I can:</li> <li>arrange counters/objects to understand the problem</li> <li>draw the problem</li> <li>explain the problem in my own words.</li> </ul>				
Answer	<ul> <li>I answer the problem. When doing this, I:</li> <li>consider the math operations I will use</li> <li>think about the steps I will follow and their proper order</li> <li>check my numbers to make sure they are written clearly and are placed correctly</li> <li>show my work.</li> </ul>				
Review	<ul> <li>I review my answer to make sure it is correct. To do this, I:</li> <li>recheck my calculations</li> <li>reread the problem and ask myself whether my answer makes sense.</li> </ul>				

#### STAR: Solving Math Word Problems

Student N	ame:	۶.7
Directions	:Use this step-by-step organi	izer as you solve each math word problem.
Step	What I Do	My Workspace
Search.	<ul> <li>I search the problem for important information by:</li> <li>reading it aloud</li> <li>highlighting key words</li> <li>crossing out information that is not important.</li> </ul>	
Translate	I translate the word problem into a number sentence. I can: arrange counters/objects to understand the problem draw the problem explain the problem in my own words.	
Answer	<ul> <li>I answer the problem. When doing this, I:</li> <li>consider the math operations I will use</li> <li>think about the steps I will follow and their proper order</li> <li>check my numbers to make sure they are written clearly and are placed correctly</li> <li>show my work.</li> </ul>	
Review	I review my answer to make sure it is correct. To do this, I: recheck my calculations reread the problem and ask myself whether my answer makes sense.	

# Grade 6: Problem: "Elijah makes a lot of careless errors on his math work."

# Intervention: Math Self-Correction Checklist
# Student Self-Monitoring: Customized Math Self-Correction Checklists

**DESCRIPTION:** The teacher analyzes a particular student's pattern of errors commonly made when solving a math algorithm (on either computation or word problems) and develops a brief error self-correction checklist unique to that student. The student then uses this checklist to self-monitor—and when necessary correct—his or her performance on math worksheets before turning them in.

Sources: Dunlap, L. K., & Dunlap, G. (1989). A self-monitoring package for teaching subtraction with regrouping to students with learning disabilities. Journal of Applied Behavior Analysis, 229, 309-314.

Uberti, H. Z., Mastropieri, M. A., & Scruggs, T. E. (2004). Check it off: Individualizing a math algorithm for students with disabilities via self-monitoring checklists. Intervention in School and Clinic, 39(5), 269-275.

Increase Student Math Success with Customized Math Self-Correction Checklists

# MATERIALS:

- Customized student math error self-correction checklist
- Worksheets or assignments containing math problems
  matched to the error self-correction checklist

Sources: Dunlap, L. K., & Dunlap, G. (1989). A self-monitoring package for teaching subtraction with regrouping to students with learning disabilities. Journal of Applied Behavior Analysis, 229, 309-314.

Uberti, H. Z., Mastropieri, M. A., & Scruggs, T. E. (2004). Check it off: Individualizing a math algorithm for students with disabilities via self-monitoring checklists. Intervention in School and Clinic, 39(5), 269-275.

## Sample Self-Correction Checklist

#### Math Self-Correction Checklist

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Rater: Student Classroom:

Directions: To the Student: BEFORE YOU START: Look at each of these goals for careful math work before beginning your assignment. AFTER EACH PROBLEM: Stop and rate YES or NO whether you performed each goal correctly.

	Problem#1	Problem#2	Problem#3	Problem#4	Problem#5
I underlined all numbers at the top of the subtraction problem that were smaller than their matching numbers at the bottom of the problem. Did the student succeed in this behavior goal? YES INO	_Y_N	_Y_N	_Y_N	_Y_N	_Y_N
I wrote all numbers carefully so that I could read them easily and not mistake them for other numbers. Did the student succeed in this behavior goal? YES INO	YN	_Y_N	YN	YN	_Y_N
I lined up all numbers in the right place-value columns. Did the student succeed in this behavior goal?	_Y_N	_Y_N	_Y_N	_Y_N	_Y_N
I rechecked all of my answers. Did the student succeed in this behavior goal?	_Y_N	_Y_N	_Y_N	_Y_N	_Y_N

# Math Interventions: Activity



05:00

- Discuss the • interventions reviewed today.
- Select at least one idea • that you would like to try with your students.

## Math Interventions

## Number Sense

**Counting Board Game** 

## Math Fact Fluency

• Peer Tutoring: Math Facts

## Math Word Problems

• STAR Self-Guided Strategy: Search-Translate-Answer-Review

# Student Self-Monitoring

Math Self-Correction Checklist



Writing Down Tier 1/Classroom *Interventions.* What is a convenient form that allows teachers to quickly document classroom intervention plans while following an RTI problemsolving process? pp. 12-18







# Teacher Problem-Solving: Just a Part of the Job...

Instructors regularly engage in problem-solving efforts, such as:

- searching the Internet for ideas to help a struggling learner.
- pulling a student aside to identify deficits in knowledge or skills and reteach instructional content as needed.
- conferencing with a student to develop an action-plan to improve academic performance.
- brainstorming with members of the grade-level or instructional team for ideas to support a student.
- meeting with a consultant (school psychologist; reading or math teacher, etc.) for intervention suggestions.
- scheduling student-parent conferences to enlist home and school to boost academic performance or address behaviors.

Teacher Problem-Solving: All the Work, Little Credit... In this era of accountability, classroom intervention efforts are not acknowledged unless they are documented: *"Teachers are already doing 90% of the work. But they are often getting zero credit."* 

RTI/MTSS provides a structure and toolkit for teachers to record and share classroom intervention plans. With little or no extra time, instructors can get full credit for their problemsolving work.









Teachers & Classroom Support Plans: Finding the Balance When helping teachers to plan Tier 1/classroom interventions, what is the right balance between *too little* and *too much* support?



# RTI/MTSS Classroom Support Plan: 'Message in a Bottle': Who might benefit?

**Colleagues**. Your intervention efforts can be read by your fellow teachers and future educators Parents & Student. You can make the creation of the Classroom Support Plan the focus of student and parent conferences.



RTI/MTSS Problem-Solving Team. Your classroom intervention plan helps the team to make better recommendations.

**CSE/Special Education Eligibility Team.** Evidence of a classroom intervention plan is often a requirement when attempting to diagnose a learning disability or other IEP condition.



## Response to Interver

# Interventions: Activity

# Documenting Interventions: Your Wish List

Imagine that—at the start of the coming school year—you receive classroom intervention plans from 2018-2019 for your at-risk students.

What essential information would you hope that previous teachers might record in these written plans? Ö.

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05:00

	eet is designed to help s.	on Planning S teachers to quickly or	heet reate classroom plans	for academic and behavioral	
Case Inf	ormation				
What to Writ end dates for	e: Record the important ( the intervention plan, and	case information, includi d the total number of ins	ng student, person deliv tructional weeks that th	ering the intervention, date of plan, start e intervention will run.	and
Student:	Josh H.	Interventionist(s):	Mr. Smith, Social Studies/Grade 7	Date Intervention Plan Was Written: 23 Oct	2014
Date Intervention is to Start:	27 Oct 2014	Date Intervention is to End:	8 Jan 2015	Total Number of Intervention Weeks:	s
Descript	ion of the Student Proble	m: Josh has difficu while reading, a	ulty creating a readi applying fix-up skills	ng plan, monitoring understandin a, and processing inform. text.	9
Intervent	tion	n of the intervention (-1)	is he used with this store	ant TIP Kana baar a saint for this	
intervention.	e: write a orier descriptio you can just write its nam	e here and attach the so	cript to this sheet.	enic The if you have a script for this	
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Building the Behavior/Social-Emotional Toolkit. What are research-based strategies that can help teachers to motivate students and decrease problem behaviors?





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# **Behavior** Toolkit pp. 22-31

#### A Toolkit: 38 Classroom Ideas to Help Students to Make Better Behavioral Choices

Behavior intervention plans are highly individualized-because every student displays a unique profile of behaviors. However, teachers will find that their chances of helping a student to engage in positive behaviors increase when they include each of these 3 elements in their classroom behavior intervention plans:

- Antecedents: Strategies to promote positive behaviors and prevent misbehavior
- Positive consequences: Responses that increase positive/goal behaviors
- Extinction procedures: Responses that extinguish problem behaviors

Every one of these elements plays a crucial role in promoting the success of a behavior plan. Antecedent strategies prevent the student from engaging in problem behaviors in the first place. Positive consequences motivate the student to show desired behaviors, such as academic engagement. Extinction procedures remove the 'pay-off' to the student for engaging in problem behaviors. While any one of the elements might be inadequate to change the student's behavior, the combination of antecedents, positive consequences, and extinction procedures can result in a strong, flexible plan and successful intervention outcome.

Teachers can use this guide to build their own behavior plans using its research-based ideas for antecedents, positive consequences, and extinction procedures.

#### Antecedents: Strategies to Prevent Misbehavior

Teachers have the greatest array of options to influence a student to engage in positive behaviors when they focus on antecedents: actions they take before the student behavior occurs. Proactive antecedent actions to encourage desired behaviors are often quick-acting, can prevent misbehavior and attendant interruption of instruction, and usually require less teacher effort than providing corrective consequences after problem behaviors have occurred. Teacher strategies to elicit positive student behaviors include making instructional adjustments, providing student. prompts and reminders, and teaching students to monitor and evaluate their work performance. Here are specific antecedent ideas that teachers can use to 'nudge' students to engage in desired behaviors:

#### Antecedents That Prevent Problem Behaviors

- Behaviors: Teach Expectations (Fairbanks, Sugai, Guardino, & Lathrop, 2007). Students must be explicitly taught behavioral expectations before they can be held accountable for those behaviors. The teacher should model positive behaviors, give students examples and non-examples of appropriate behaviors to clarify understanding, have students practice those behaviors with instructor feedback; and consistently acknowledge and praise students for successfully displaying positive behaviors.
- Instructional Match: Ensure the Student Can Do the Work (Burns, VanDerHeyden, & Boice, 2008). Student. misbehavior frequently arises from an inability to do the academic task. When the student lacks skills necessary for the academic task, the instructor teaches the necessary skill(s). Additional strategies include adjusting the immediate task to the student's current skill(s) and pairing the student with a helping peer.

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# ABC Time-line

The ABC (Antecedent-Behavior-Consequence) timeline shows the elements that contribute to student behaviors: (a) the Antecedent, or trigger; (b) the student Behavior; and (c) the Consequence of that behavior.



## **Extinction Procedures: REDUCE or ELIMINATE Behaviors**

**Planned Ignoring: Turn Off the Attention** (Colvin, 2009). In planned ignoring, the instructor withholds attention when the student engages in the problem behavior. Ignoring problem behavior can remove the source of its reinforcement and thus help to extinguish it.

Teachers should remember, though, that planned ignoring alone is seldom successful. Instead, planned ignoring becomes much more powerful when, at the same time, the teacher provides regular attention whenever the student engages in positive, replacement behaviors.

## Positive Consequences: INCREASE Positive/Goal Behaviors

Scheduled Attention: Rechannel Adult Interactions (Austin & Soeda, 2008). A strategy to increase positive behaviors is to 'catch the student being good' with regular doses of 'scheduled attention': (1) The teacher decides on a fixed-interval schedule to provide attention (e.g., every 8 minutes); (2) At each interval, the teacher observes the student; (3) If the student is engaged in appropriate behaviors at that moment, the teacher provides a dose of positive attention (e.g., verbal praise; non-verbal praise such as thumbs-up; brief positive conversation; encouragement). If off-task or not behaving appropriately, the teacher briefly redirects the student to task and returns immediately to instruction until the next scheduled-attention interval.

 'Two by Ten': Engage in Brief Positive Chats (Mendler, 2000). If a teacher has a strained (or nonexistent) relationship with a particular student, that instructor may want to jump-start a more positive pattern of interaction using the 'two-by-ten' intervention.

With this time efficient strategy, the teacher commits to having a positive 2-minute conversation with the student at least once per day across 10 consecutive school days. The active ingredient in the intervention is regular and positive teacher attention delivered at times when the student is engaged in appropriate behavior.



- 2. Browse the ideas in the academic interventions table. (This includes links to other intervention websites.)
- 3. Locate at least 1 intervention strategy that you might want to use with your student(s).
- 4. Be prepared to report out.

# What Classroom Supports Help a Struggling Student?

1. PROBLEM IDENTIFICATION. The student's specific academic deficits have been clearly defined.



- 2. INTERVENTIONS. The student receives research-based interventions to help them to succeed in core instruction.
- 3. ACCOMMODATIONS. The student has access to classroom accommodations as needed to reach grade-level potential.
- 4. PLAN. The student has a written intervention plan.
- 5. DATA. The student has assessment data collected to better understand the academic delay and/or to track progress.

# Activity: What Are Your Next Steps?

- Review the key information shared at today's workshop.
- What are 2-3 key ideas and/or resources from this training that you would like to try back in your classroom?



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05:00