Grades 2-6: Academic Interventions: A Teacher Toolkit

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http://www.interventioncentral.org/slvboces

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In a completely rational society, the best of us would be teachers and the rest of us would have to settle for something less.

-Lee lacocca

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Intervention Sampler. What are examples of academic instruction/interventions that teachers can use in the elementary classroom?













Sampler: Academic Interventions:

- 1. Incremental Rehearsal (Phonics)
- 2. Letter Cube Blending (Phonics/Alphabetics)
- 3. Reading Racetrack (Vocabulary)
- 4. Paired Reading (Fluency)
- 5. HELPS Program (Fluency)
- 6. Group-Based Repeated Reading (Fluency)
- 7. Click or Clunk (Comprehension)
- 8. Question Generation (Comprehension)
- 9. Linking Pronouns to Referents (Comprehension)
- 10. Sentence Combining (Syntax)
- 11. Cover-Copy-Compare (Math Facts)
- 12. Classwide Peer Tutoring (Math Facts)

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Big Ideas 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.
- 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.
- Comprehension: The complex cognitive process involving the intentional interaction between reader and text to convey meaning."

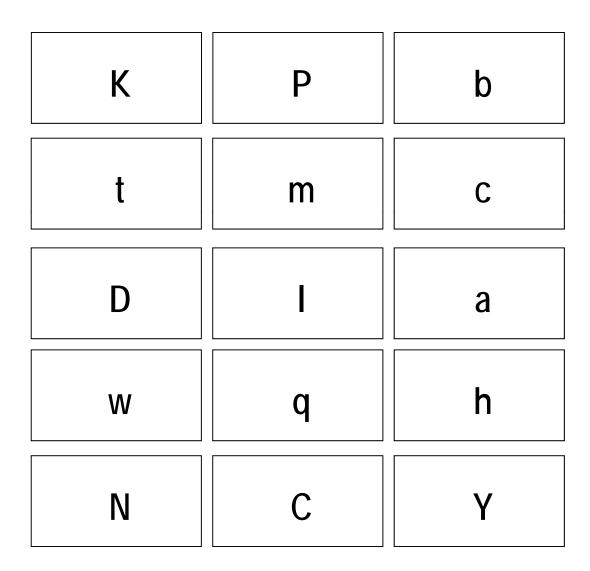
Source: Big ideas in beginning reading. University of Oregon. Retrieved September 23, 2007, from

http://reading.uoregon.edu/index.php

Sample Strategies to Promote...Phonics/Alphabetics

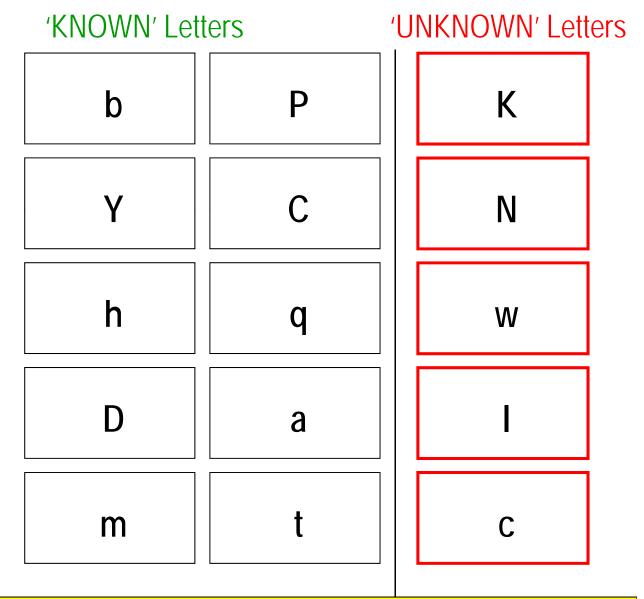
Letter Names: Incremental Rehearsal

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



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.

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Incremental Rehearsal of Letter Names

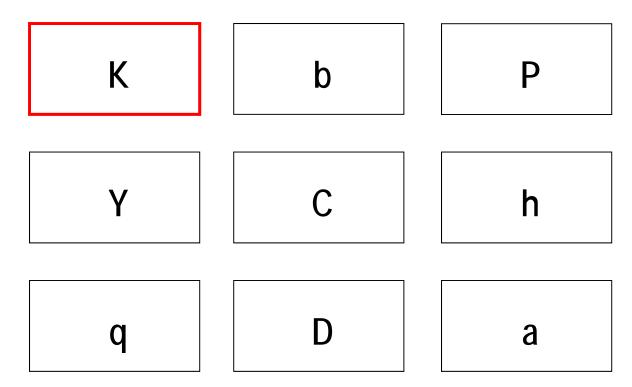
Step 3 (Cont.): Next the tutor takes a letter from the 'known' pile and pairs it with the unknown letter. When shown each of the two letters, the student is asked to identify it.

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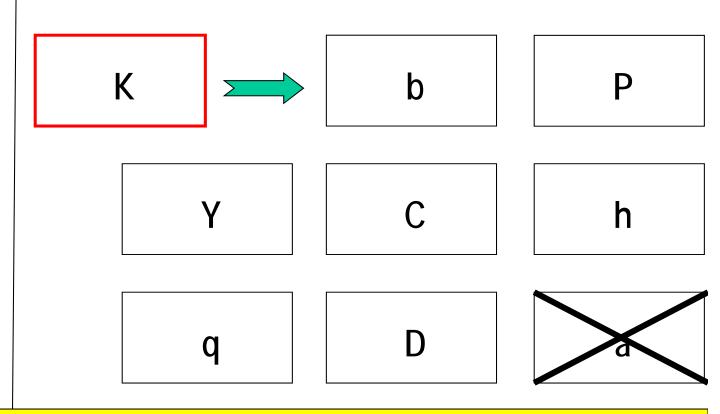
Incremental Rehearsal of Letter Names

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.

N K b
P Y C
h O D

Letter Cube Blending

d || i

r

 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: b,d,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.

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

d





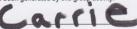
Sources: Florida Center for Reading Research. (2009). Letter cube blending. Retrieved from http://www.fcrr.org/SCAsearch/PDFs/K-1P_036.pdf

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.

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

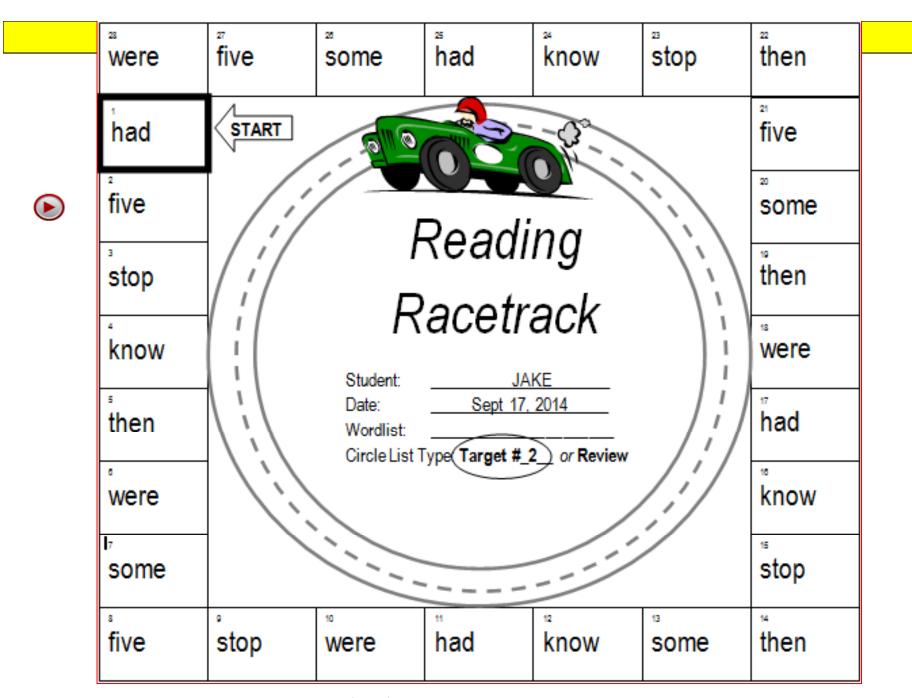


Real Word	Nonsense Word
bar fun	dir
fun	

Sample Strategy to Promote...Sight-Word Vocabulary

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.

£ (11	2 WI! 0		E W			4	
How the Common Core Works' Series © 2014 Jim Wright Reading Racetrack Score Sheet Studen			<u> </u>	www.interventioncentral.org Wordlist:		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.

Sample Strategies to Promote...Reading Fluency

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.

Tutorial: Distinguishing Between an Intervention Practice and a Program



- Practice. An intervention 'practice' is an educational practice that has been found through research to be effective in improving student academic or behavioral performance.
- Program. An intervention 'program' is usually a packaged approach that has multiple components and that is scripted. Programs often incorporate several researchbased practices.

Both 'practices' and 'programs' have their place on RTI intervention plans.

Intervention **Practice** Example: Repeated Reading

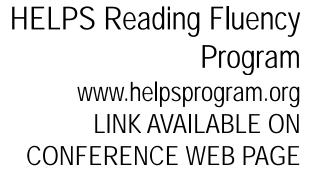


This intervention targets reading fluency (Lo, Cooke, & Starling, 2011). The student is given a passage and first 'rehearses' that passage by following along silently as the tutor reads it aloud. Then the student reads the same passage aloud several times in a row, with the tutor giving performance feedback after each re-reading.

Intervention **Program** 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:
 - 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.







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 training for free.

READ MORE

Strengths of One-on-One Program

- scientifically-validated
- Requires no more than 10-12 minutes per day, 2-3 days
- Has been successfully used with students of all different
- Can be easily integrated as part of a school's Response: to Intervention (RTI) model

READ MORE (C)

Importance of Reading Fluency

An extensive amount of confirmed that reading fluency

Other HELPS **Programs**

At the present time, all One-on-One Program are

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





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 disadvantaged backgrounds. Through the HELPS Education Fund, teachers and schools can apply to receive free educational services related to reading instruction. Teachers and schools can also apply for free educational materials beyond the free, downloadable materials offered from this

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 opt to purchase a set of pre-assembled, professionally developed HELPS Program materials (for only \$45 per set). Second, individuals or organizations can make tex-deductable danations directly to the Fund. 100% of proceeds from purchased HELPS materials and 100% of donations to The HELPS Education Fund are used to improve educational outcomes for students.

READ MORE

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- Sasy CSM
- The Education Trust
- Evidence Based Intervention Network
- Florida Conter for Reading Research
- Intervention Central
- National Conter for Education Statistics

UPDATES

Program Updates

- Thousands of educators are using
- Sharing HELPS with other educators is cosy

Research Updates Posted on July 6, 2010

- Recent Journal publication about
- Pilot studies of small-group HELPS Program

Website Updates

Posted on July 6, 2010

- HELPS mobalic improves in several

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.
- 1 copy of the *Group Repeated Reading Intervention Behavior Rating Scale* (two versions of which appear later in this document).

Source: Klubnik, C., & Ardoin, S. P. (2010). Examining immediate and maintenance effects of a reading intervention package on generalization materials: Individual versus group implementation. *Journal of Behavioral Education*, 19, 7-29.

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.)

Source: Klubnik, C., & Ardoin, S. P. (2010). Examining immediate and maintenance effects of a reading intervention package on generalization materials: Individual versus group implementation. *Journal of Behavioral Education*, 19, 7-29.

Group-Based Repeated Reading

Procedure.

Repeated Readings. The tutor next has the students read 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.

Source: Klubnik, C., & Ardoin, S. P. (2010). Examining immediate and maintenance effects of a reading intervention package on generalization materials: Individual versus group implementation. *Journal of Behavioral Education*, 19, 7-29.

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.

Group-Based Repeated Reading

Procedure.

- 4. Contingent Reward. At the start of each tutoring session, the tutor reviews with the group the 3 behavioral expectations from the Group Repeated Reading Intervention Behavior Rating Scale:
 - When asked to read aloud, I did my best reading.
 - When others were reading, I paid close attention.
 - I showed good behaviors and followed all directions quickly.

The tutor reminds the students that they can earn a reward if they observe these behavioral expectations.

Group Repeated Reading Intervention Behavior Rating Scale

Student Name: Reading Group Students	Date:
Rater: Tutor	Classroom:

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.

	Student 1	Student 2	Student 3
When asked to read aloud, I did my best reading.			
The degree to which Reading Group Students met this behavior goal	⊗ ⊜ ⊜ 1 2 3	⊗ ⊜ ⊜ 1 2 3	⊗ ⊜ ⊜ 1 2 3
≅			
When others were reading, I paid close attention.			
The degree to which Reading Group Students met this behavior goal	⊗ ⊕ ⊕ 1 2 3	⊗ ⊕ ⊕ 1 2 3	⊗ ⊕ ⊕ 1 2 3
showed good behaviors and followed all lirections quickly.			
The degree to which Reading Group Students met this behavior goal		⊗ ⊜ ⊙ 1 2 3	
≅			

Group Repeated Reading Intervention Behavior Rating Scale

Student Name: Reading Group Students	Date:
Rater: Tutor	Classroom:
Directions: Review each of the Behavior Report Card items below. F behavior or met the behavior goal.	or each item, rate the degree to which the student showed the

	Student 1	Student 2	Student 3
When asked to read aloud, I did my best reading.			
How well Reading Group Students did in meeting the behavior goal?	P F G 123	P F G 13	P F G 123
123 Poor Fair Good			
When others were reading, I paid close attention.			
How well Reading Group Students did in meeting the behavior goal?	P F G 123	P F G 123	P F G 123
123 Poor Fair Good			
l showed good behaviors and followed all directions quickly.			
How well Reading Group Students did in meeting the behavior goal?	P F G 123	P F G 123	P F G 123
123 Poor Fair Good			

Group-Based Repeated Reading

Procedure.

4. Contingent Reward (Cont.) At the end of the session, the tutor rates each student's behavior on the Group Repeated Reading Intervention Behavior Rating Scale. Any student who earns a top score (3 points) on all rating items receives a nickel (Klubnik & Ardoin, 2010), sticker, or other modest reward.

Sample Strategies to Promote...Reading Comprehension

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.

The Savy Teacher's Guide: Reading Interventions That Work I'm Wright (monintervention centralong)

MY READING CHECK SHEET*

Name: _____ Class: ____



'Click or Clunk'

Check Sheet

Sentence Check... "Did I understand this

sentence?"

If you had trouble understanding a word in the sentence, try...

- Reading the sentence over.
- Reading the next sentence.
- Looking up the word in the glossary (if the book or article has one).
- Asking someone.

If you had trouble understanding the meaning of the sostosce, try...

- Reading the sentence over.
- Reading the whole paragraph again.
- Reading on.
- Asking someone.





Paragraph Check... "What did the

paragraph say?"

If you had trouble understanding what the paragraph said, try...

Reading the paragraph over.



Page Check... "What do I remember?"

If you had trouble remembering what was said on this page, try...

 Re-reading each paragraph on the page, and asking yourself, "What did it say?"

^{*}Adapted from Anderson (1980), Babbs (1984)

Reading Comprehension 'Fix-Up' Skills: A Toolkit

 [Student Strategy] Identifying or Constructing Main Idea Sentences (Question Generation) (Davey & McBride, 1986; Rosenshine, Meister & Chapman, 1996). For each paragraph in an assigned reading, the student either (a) highlights the main idea sentence or (b) highlights key details and uses them to write a 'gist' sentence. The student then writes the main idea of that paragraph on an index card. On the other side of the card, the student writes a question whose answer is that paragraph's main idea sentence. This stack of 'main idea' cards becomes a useful tool to review assigned readings.

Reading Comprehension 'Fix-Up' Skills: A Toolkit (Cont.)

[Student Strategy] 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 "

Sample Strategy to Promote...Writing: Grammar & Syntax

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

 In each example, the base clause (sentence) appears first. Any sentence(s) to be combined or embedded with the base clause appear below that base clause.

Example: **Base clause:** The dog ran after the bus.

Sentence to be embedded: The dog is <u>yellow</u>.

Student-Generated Solution: The yellow dog ran after the bus.

'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.

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

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

Table 1: Sentence-combining types and examples (Saddler, 2005; Strong, 1986)		
Type of Sentence	Sentence Combining Example	
Possessive Nouns: A sentence that describes possession or ownership can be reduced to a possessive noun and embedded in another sentence.	 Some historians view the Louisiana Purchase as the most important expansion of United States territory. The Louisiana Purchase was <u>President Jefferson's</u> achievement. 	
	Some historians view President Jefferson's Louisiana Purchase as the most important expansion of United States territory.	

Sample Strategies to Promote...Math Facts

Math Facts: Cover-Copy-Compare

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 to Worksheet: Co

Cover-Copy-
Compare Math
Fact Student
Worksheet

Worksheet: Cover-Copy-Compare Stu	dent: Date:
Math Facts	Student Response
1. 9 x 7 = 63	1a.9 × 7 = 63
	1b.
$ 2 9 \times 2 = 18$	2a.
	2b.
$\frac{3}{4} = 36$	3a.
	3b.
$\frac{1}{4} 9 \times 1 = 9$	4a.
	4b.
5. $9 \times 9 = 81$	5a.
	5b.
$6.9 \times 6 = 54$	6a.
	6b.
$_{7}$ 9 x $3 = 27$	7a.
	7b.
$\frac{1}{8}$ 9 x 5 = 45	8a.
	8b.
$9.9 \times 10 = 90$	9a.
	9b.
10. $9 \times 8 = 72$	10a.
اً قا معروباتها	10b.
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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.

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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.

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PREPARATION: To prepare for the tutoring program, the teacher selects students to participate and trains them to serve as tutors.

Select Student Participants. Students being considered for the reciprocal peer tutor program should at minimum meet these criteria (Telecsan, Slaton, & Stevens, 1999, Menesses & Gresham, 2009):

- ☐ Is able and willing to follow directions;
- ☐ Shows generally appropriate classroom behavior;
- ☐ Can attend to a lesson or learning activity for at least 20 minutes.

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- Select Student Participants (Cont.). Students being considered for the reciprocal peer tutor program should at minimum meet these criteria (Telecsan, Slaton, & Stevens, 1999, Menesses & Gresham, 2009):
- Is able to name all numbers from 0 to 18 (if tutoring in addition or subtraction math facts) and name all numbers from 0 to 81 (if tutoring in multiplication or division math facts).
- Can correctly read aloud a sampling of 10 math-facts (equation plus answer) that will be used in the tutoring sessions. (NOTE: The student does not need to have memorized or otherwise mastered these math facts to participate—just be able to read them aloud from cards without errors).
- [To document a deficit in math computation] When given a two-minute math computation probe to complete independently, computes **fewer** than 20 correct digits (Grades 1-3) or **fewer** than 40 correct digits (Grades 4 and up) (Deno & Mirkin, 1977).

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Peer Tutoring in Math Computation: Teacher Nomination Form

Reciprocal Peer	T4	-	Character and the first and a	. T		
THE CONTRACT PROPERTY	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			The second second	INCOME THE PROPERTY OF THE REAL PROPERTY OF THE REA	
TOTAL CONTROL OF THE PARTY OF T	1 2012 2011 1201 1111			A CONTRACT PARTY		011 0 0 11

Teacher-	Classroom:	Date:	

Directions: Select students in your class that you believe would benefit from participation in a peer tutoring program to boost math computation skills. Write the names of your student nominees in the space provided below.

Remember, students who are considered for the peer tutoring program should—at minimum—meet these criteria:

- Show generally appropriate classroom behaviors and follow directions.
- Can pay attention to a lesson or learning activity for at least 20 minutes.
- Are able to wait appropriately to hear the correct answer from the tutor if the student does not know the enswer.
- When given a two-minute math computation probe to complete independently, computes fewer than 20 correct digits (Grades 1-3) or fewer than 40 correct digits (Grades 4 and up) (Deno & Mirkin, 1977).
- Can name all numbers from 0 to 18 (if tutoring in addition or subtraction math facts) and name all numbers from 0 to 81 (if tutoring in multiplication or division math facts).
- Can correctly read aloud a sampling of 10 mathfacts (equation plus answer) that will be used in the tutoring sessions. (NOTE: The student does not need to have memorized or otherwise mastered these math facts to participate—just be able to read them aloud from cards without errors).

Number	Student Name	NOTES
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

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.

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- **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 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 progressmonitoring components of the math peer tutoring.

Peer Tutoring in Math Computation: Intervention Integrity Sheet: (Part 1: **Tutoring** Activity)

Peer Tutoring	in Math (Computation with Constant Time Delay:	Integrity Checklist
	,	Tutoring Session: Intervention Phase	
Directions: Observ	e the tutor a	nd tutee for a full intervention session. Use this checkl	ist to record whether each of
the key steps of the	intervention	were correctly followed.	
Correctly	Step	Tutor Action	NOTES
Carried Out?			
	1.	Promptly Initiates Session. At the start of the	
YN	1.	timer, the tutor immediately presents the first	
		math-fact card.	
V N	2.	Presents Cards. The tutor presents each card to	
YN	<u>-</u> .	the tutee for 3 seconds.	
YN	3.	Provides Tutor Feedback. [When the tutee	
YN	-	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	
YN	4.	Provides Praise. The tutor praises 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.	
		snumes them before again presenting cards.	
	6	Continues to the Timer. The tutor continues to	
YN	٠.	presents math-fact cards for tutee response until	
		the timer rings.	
<u>. </u>		<u>.I.</u>	

Peer Tutoring in Math Computation: Intervention **Integrity Sheet** (Part 2: Progress-Monitoring)

		Tutoring Session: Assessment Phase	
		nd tutee during the progress-monitoring phase of the sess steps of the assessment were correctly followed.	sion. Use this checklist to
Correctly Carried Out?	Step	Tutor Action	NOTES
YN	1.	Presents Cards. The tutor presents each card to the tutee for 3 seconds.	
YN	2.	Remains Silent. The tutor does not provide performance feedback or praise to the tutee, or otherwise talk during the assessment phase.	
YN	3.	Sorts Cards. The tutor sorts cards into 'correct' and 'incorrect' piles based on the tutee's responses.	
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.	

Peer Tutoring in Math Computation: Score Sheet

Math Tutoring: So	core Sheet	
Tutor 'Coach':	Tutee 'Flayer'	:
Directions to the Tutor: Wri answered correctly and the n		t cards that your partner
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

Teachers: Providing Classroom Reading & Writing Interventions

Suggestions for Implementation:

- The school or district should develop a bank of research-based intervention ideas that teachers can use immediately.
- Teachers should consider teaching a particular intervention strategy to the entire class if substantial numbers of students need to learn that strategy.
- The school should pull together a collection of 'portable' student-directed intervention ideas (e.g., 'Ask-Read-Tell') that can be taught in a variety of settings, such as classrooms, study halls, after-school help sessions, counselor meetings, parent conferences, etc.



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05:00

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Group Activity: *Reading/Writing/Math Interventions*

At your tables:

- Consider the academic intervention ideas shared here.
- Discuss how you might use one or more of these strategies in your classroom.

Sampler: Academic Interventions:

- 1. Incremental Rehearsal (Phonics)
- 2. Letter Cube Blending (Phonics/Alphabetics)
- 3. Reading Racetrack (Vocabulary)
- 4. Paired Reading (Fluency)
- 5. HELPS Program (Fluency)
- 6. Group-Based Repeated Reading (Fluency)
- 7. Click or Clunk (Comprehension)
- 8. Question Generation (Comprehension)
- 9. Linking Pronouns to Referents (Comprehension)
- 10. Sentence Combining (Syntax)
- 11. Cover-Copy-Compare (Math Fact)
- 12. Classwide Peer Tutoring (Math Facts)









RTI: Data Collection. What is an example of a data collection method to measure the effectiveness of a classroom intervention?



Behavior Report Cards

 What It Is. A behavior report card is a type of rating scale that the teacher fills out on a regular basis--e.g., daily-- to rate targeted student behaviors (Riley-Tillman, Chafouleas, & Briesch, 2007).

Behavior Report Card Example: Roy: Classroom Attention

Roy: Classroom Attention

Student Name: Roy	Date:			
Rater: Wright	Classroom:			
	ew each of the Behavior Report Card items below. For each item, rate the the student showed the behavior or met the behavior goal.			
Roy spoke respectfully and complied with argument or complaint.	h Mrs. Smith's requests within 1 minute without			
Did Roy suc	cceed in this behavior goal?			
C	YES NO			
Roy sat in class without fidgeting or squir	irming more than most peers.			
Percentage of times Roy showed th	his behavior out of total opportunities to engage in it			
0%10%20%30%40%	650%60%70%80%90%100%			
Roy left his seat only with permission dur	ring academic periods.			
The degree to w	which Roy met this behavior goal			
8	⊕ ©			
1	2 3			
Roy took notes on lecture content, captur	ring the essential information presented.			
How well Roy di	lid in meeting the behavior goal?			
1	23			
Poor	or Fair Good			
I have reviewed this completed Behavior Rep	port with my child.			
Parent Signature:	Date:			
Comments:				

Behavior Report Cards

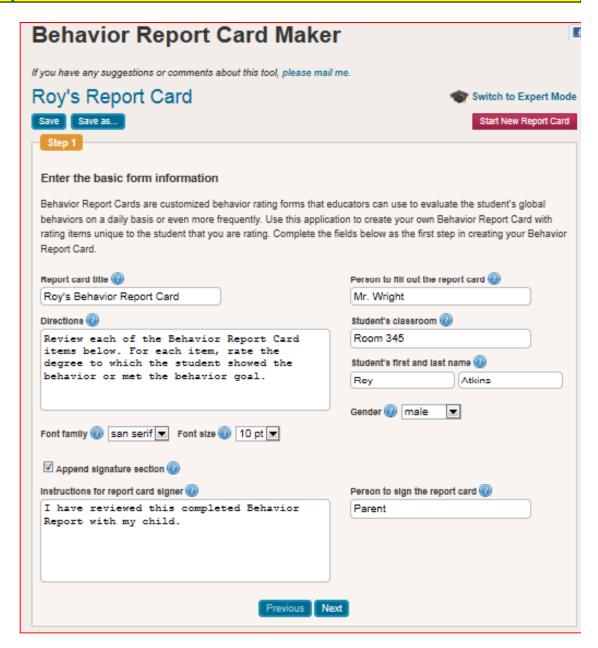
 When to Use It. Behavior report cards are an optimal measurement tool for teachers to use in tracking classroom behaviors.

Behavior report cards have several advantages: They are quick to complete, can be customized by the teacher to measure any observable behavior, and are an excellent vehicle for communicating classroom behavioral expectations to students and parents.

Behavior Report Cards

- How to Assess and Where to Find Materials. Classroom behaviors that can be assessed via a BRC are specific, observable behaviors that relate to such categories as general conduct (e.g., remaining in seat, calling out), compliance (e.g., following teacher directives); and academic readiness and engagement (e.g., paying attention to the teacher during a lesson, completing independent seatwork, bringing work materials to class).
- Teachers can use a free online app to create custom BRCs in PDF format.

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

- Helps teachers to define student problem(s) more clearly.
- Reframes student concern(s) as replacement behaviors, to increase the likelihood for success with the academic or behavioral intervention.
- Provides a fixed response format each day to increase the consistency of feedback about the teacher's concern(s).
- Can serve as a vehicle to engage other important players (student and parent) in defining the problem(s), monitoring progress, and implementing interventions.



02:00

Activity: Data Collection

At your tables:

Discuss the Behavior Report Card and how you might use this data collection tool in your classroom.

Classroom Assessment

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Behavior Report Cards

	Roy: C	lassroom A	ttention	
Student Name: Roy		Date:		
Rater: Wright		Classro	om:	
Directions: Review e degree to which the			ms below. For each iter the behavior goal.	m, rate the
Roy spoke respectfully argument or complaint	•	th Mrs. Smith's r	equests within 1 min	ute without
	Did Roy su	occeed in this beh	avior goal?	
		YES NO		
Roy sat in class withou	t fidgeting or squ	irming more tha	n most peers.	
Percentage of t	mes Roy showed t	this behavior out o	of total opportunities to	engage in it
0%10%20	9%30%409	%50%609	%70%80%	90%100%
Roy left his seat only w	ith permission du	ıring academic p	periods.	
	The degree to	which Roy met thi	is behavior goal	
	⊗ 1	<u>∷</u> 2	© 3	
Roy took notes on lect	ure content, captu	ıring the essenti	al information presen	ited.
	How well Roy	did in meeting the	behavior goal?	
	1.	2	3	
	Por	or Fair Go	ood	
I have reviewed this com	pleted Behavior Re	eport with my child	d.	
Parent Signature:			Date:	
Comments:				

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A journey of a thousand miles must begin with a single step.

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Lao Tzu, Chinese Taoist (600 BC-531 BC)