RTI: The Role of the Teacher as Classroom ‘First Responder’

Jim Wright

www.interventioncentral.org
Access PPTs and other materials from this workshop at:

http://www.interventioncentral.org/brentwood
I have come to believe that a great teacher is a great artist... Teaching might even be the greatest of the arts since the medium is the human mind and spirit.

- John Steinbeck
<table>
<thead>
<tr>
<th>Teacher as Classroom First Responder: A Mosaic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of the Response to Intervention Model</td>
</tr>
<tr>
<td>Collection of Data to Monitor Student Intervention Progress</td>
</tr>
<tr>
<td>Documentation of Intervention Plans</td>
</tr>
</tbody>
</table>

www.interventioncentral.org
RTI: The Big Picture. What is Response to Intervention? And how can RTI support the Common Core Standards?
Essential Elements of RTI (Fairbanks, Sugai, Guardino, & Lathrop, 2007)

1. A “continuum of evidence-based services available to all students” that range from universal to highly individualized & intensive

2. “Decision points to determine if students are performing significantly below the level of their peers in academic and social behavior domains"

3. “Ongoing monitoring of student progress"

4. “Employment of more intensive or different interventions when students do not improve in response” to lesser interventions

5. “Evaluation for special education services if students do not respond to intervention instruction"

What does RTI look like when applied to an individual student?

A widely accepted method for determining whether a student should be referred to Special Education under RTI is the ‘dual discrepancy model’ (Fuchs, 2003).

- Discrepancy 1: The student is found to be performing academically at a level significantly below that of his or her typical peers (discrepancy in initial skills or performance).

- Discrepancy 2: Despite the implementation of one or more well-designed, well-implemented interventions tailored specifically for the student, he or she fails to ‘close the gap’ with classmates (discrepancy in rate of learning relative to peers).
Response to Intervention

Avg Classroom Academic Performance Level

Discrepancy 1: Skill Gap (Current Performance Level)

Target Student

Discrepancy 2: Gap in Rate of Learning (‘Slope of Improvement’)

‘Dual-Discrepancy’: RTI Model of Learning Disability (Fuchs 2003)

www.interventioncentral.org
Common Core State Standards Initiative
http://www.corestandards.org/

View the set of Common Core Standards for English Language Arts (including writing) and mathematics being adopted by states across America.

Common Core State Standards:
Supporting Different Learners in ELA

“The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. No set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom.”

Common Core State Standards:
Supporting Different Learners in ELA

“...It is also beyond the scope of the Standards to define the full range of supports appropriate for English language learners and for students with special needs. At the same time, all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post–high school lives.”

Response to Intervention (RTI)

Response to Intervention (RTI) is a blue-print that schools can implement to proactively identify students who struggle with academic and/or behavioral deficits and provide them with academic and behavioral intervention support. RTI divides school support resources into 3 progressively more intensive levels—or 'tiers'—of intervention. RTI first gained national recognition when written into congressional legislation, the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004.

Because the focus of RTI is on the underperforming learner, schools can use this approach as the 'toolkit' for helping struggling learners to attain the ambitious standards of the Common Core.
Activity: What Are Your School’s Greatest Challenges?

• In your groups, discuss the most significant challenges that your school faces in educating your students.
• Narrow the list of challenges to your TOP 2-3.
• Be prepared to share with the larger group.
**Intervention Sampler.** What are examples of reading, math & writing instruction/interventions that teachers can use in the classroom?
Reading/Writing/Math

Interventions:

1. Reading Racetrack (Vocabulary)
2. Assisted Cloze Reading (Fluency)
3. Paired Reading (Fluency)
4. HELPS Program (Fluency)
5. Group-Based Repeated Reading (Fluency)
6. Click or Clunk (Comprehension)
7. Cover-Copy-Compare (Math Computation)
8. Classroom Peer Tutoring in Math Computation
9. Math Self-Correction Checklists (Self-Monitoring)
10. Sentence Combining (Writing/Syntax)
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.

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.”

Sample Strategy to Promote...Sight-Word Vocabulary
Response to Intervention

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.

### Reading Racetrack Score Sheet

<table>
<thead>
<tr>
<th></th>
<th>TARGET LIST 1</th>
<th>TARGET LIST 2</th>
<th>TARGET LIST 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#/Words</td>
<td>#/Errors</td>
<td>Practice Words</td>
<td>#/Words</td>
</tr>
<tr>
<td></td>
<td>Correct</td>
<td></td>
<td></td>
<td>Correct</td>
</tr>
<tr>
<td>First Read</td>
<td></td>
<td></td>
<td></td>
<td>First Read</td>
</tr>
<tr>
<td>Second Read</td>
<td></td>
<td></td>
<td></td>
<td>Second Read</td>
</tr>
<tr>
<td>Third Read</td>
<td></td>
<td></td>
<td></td>
<td>Third Read</td>
</tr>
<tr>
<td>Fourth Read</td>
<td></td>
<td></td>
<td></td>
<td>Fourth Read</td>
</tr>
<tr>
<td>Fifth Read</td>
<td></td>
<td></td>
<td></td>
<td>Fifth Read</td>
</tr>
</tbody>
</table>

Sample Strategy to Promote...Reading Fluency
Reading Standards: Foundation Skills for K-5

Grade 5 students:

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
   
   a. Read grade-level text with purpose and understanding.
   b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
   c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Classroom Academic Interventions: Reading Fluency

• ASSISTED CLOZE INTERVENTION: INCREASE READING FLUENCY. The teacher selects a passage at the student's instructional level. The teacher reads aloud from the passage while the student follows along silently and tracks the place in the text with a finger. Intermittently, the teacher pauses and the student is expected to read aloud the next word in passage.

The process continues until the entire passage has been read. Then the student is directed to read the text aloud while the teacher follows along silently. Whenever the student commits a reading error or hesitates for 3 seconds or longer, the teacher provides error correction.

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 research-based practices.

Both ‘practices’ and ‘programs’ have their place on RTI intervention plans.
An extensive review of the literature indicates that classroom practices that encourage repeated oral reading with feedback and guidance leads to meaningful improvements in reading expertise for students—for good readers as well as those who are experiencing difficulties.”—p. 3-3
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.
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.
HELPS Reading Fluency Program
www.helpsprogram.org
LINK AVAILABLE ON CONFERENCE WEB PAGE
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.

Response to Intervention

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).

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 read-through, 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.

2. *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.

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.

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.

<table>
<thead>
<tr>
<th>Item</th>
<th>Student 1</th>
<th>Student 2</th>
<th>Student 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>When asked to read aloud, I did my best reading.</td>
<td><img src="#" alt="Face" /> <img src="#" alt="Face" /> <img src="#" alt="Face" /></td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>The degree to which Reading Group Students met this behavior goal</td>
<td><img src="#" alt="Face" /> <img src="#" alt="Face" /> <img src="#" alt="Face" /></td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>When others were reading, I paid close attention.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The degree to which Reading Group Students met this behavior goal</td>
<td><img src="#" alt="Face" /> <img src="#" alt="Face" /> <img src="#" alt="Face" /></td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>I showed good behaviors and followed all directions quickly.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The degree to which Reading Group Students met this behavior goal</td>
<td><img src="#" alt="Face" /> <img src="#" alt="Face" /> <img src="#" alt="Face" /></td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>
# Response to Intervention

## 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.

<table>
<thead>
<tr>
<th><strong>When asked to read aloud, I did my best reading.</strong></th>
<th><strong>Student 1</strong></th>
<th><strong>Student 2</strong></th>
<th><strong>Student 3</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>How well Reading Group Students did in meeting the behavior goal?</td>
<td>P   F   G</td>
<td>1   2   3</td>
<td>P   F   G</td>
</tr>
<tr>
<td>Poor   Fair   Good</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>When others were reading, I paid close attention.</strong></th>
<th><strong>Student 1</strong></th>
<th><strong>Student 2</strong></th>
<th><strong>Student 3</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>How well Reading Group Students did in meeting the behavior goal?</td>
<td>P   F   G</td>
<td>1   2   3</td>
<td>P   F   G</td>
</tr>
<tr>
<td>Poor   Fair   Good</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>I showed good behaviors and followed all directions quickly.</strong></th>
<th><strong>Student 1</strong></th>
<th><strong>Student 2</strong></th>
<th><strong>Student 3</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>How well Reading Group Students did in meeting the behavior goal?</td>
<td>P   F   G</td>
<td>1   2   3</td>
<td>P   F   G</td>
</tr>
<tr>
<td>Poor   Fair   Good</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
Grade 5 students:

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.

Response to Intervention

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.

Response to Intervention

MY READING CHECK SHEET*

Name: ___________________ Class: ___________________

**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 sentence, 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 (1990), Babbie (1994)
Sample Strategy to Promote... Math Computation
Grade 3: Operations & Algebraic Thinking

Operations and Algebraic Thinking

Multiply and divide within 100.

7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

The Importance of Math-Fact Mastery

- Math-fact mastery permits students to shift valuable cognitive capacity away from simple calculations toward higher-level problem-solving (Gersten, Jordan, & Flojo, 2005; National Mathematics Advisory Panel, 2008).

- An important goal for schools is to ensure that students are proficient in math-facts by the end of grade 5 (Kroesbergen & Van Luit, 2003) to better prepare them for the demanding middle-school math curriculum.
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).
<table>
<thead>
<tr>
<th>Math Facts</th>
<th>Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. $9 \times 7 = 63$</td>
<td>$9 \times 7 = 63$</td>
</tr>
<tr>
<td>2. $9 \times 2 = 18$</td>
<td></td>
</tr>
<tr>
<td>3. $9 \times 4 = 36$</td>
<td></td>
</tr>
<tr>
<td>4. $9 \times 1 = 9$</td>
<td></td>
</tr>
<tr>
<td>5. $9 \times 9 = 81$</td>
<td></td>
</tr>
<tr>
<td>6. $9 \times 6 = 54$</td>
<td></td>
</tr>
<tr>
<td>7. $9 \times 3 = 27$</td>
<td></td>
</tr>
<tr>
<td>8. $9 \times 5 = 45$</td>
<td></td>
</tr>
<tr>
<td>9. $9 \times 10 = 90$</td>
<td></td>
</tr>
<tr>
<td>10. $9 \times 8 = 72$</td>
<td></td>
</tr>
</tbody>
</table>
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

**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, Meneses & 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.
Peer Tutoring in Math Computation with Constant Time Delay

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).
Peer Tutoring in Math Computation: Teacher Nomination Form

Response to Intervention

Reciprocal Peer Tutoring in Math Computation: Teacher Nomination Form

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.
- 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).
- Are able to wait appropriately to hear the correct answer from the tutor if the student does not know the answer.
- 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).
- 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) (Devo & Miklin, 1977).

<table>
<thead>
<tr>
<th>Number</th>
<th>Student Name</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 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: Intervention Integrity Sheet: (Part 1: Tutoring Activity)

<table>
<thead>
<tr>
<th>Correctly Carried Out?</th>
<th>Step</th>
<th>Tutor Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Y ___ N</td>
<td>1.</td>
<td>Promptly Initiates Session. At the start of the timer, the tutor immediately presents the first math-fact card.</td>
</tr>
<tr>
<td>___ Y ___ N</td>
<td>2.</td>
<td>Presents Cards. The tutor presents each card to the tutee for 3 seconds.</td>
</tr>
<tr>
<td>___ Y ___ N</td>
<td>3.</td>
<td>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.</td>
</tr>
<tr>
<td>___ Y ___ N</td>
<td>4.</td>
<td>Provides Praise. The tutor praises the tutee immediately following correct answers.</td>
</tr>
<tr>
<td>___ Y ___ N</td>
<td>5.</td>
<td>Shuffles Cards. When the tutor and tutee have reviewed all of the math-fact cards, the tutor shuffles them before again presenting cards.</td>
</tr>
<tr>
<td>___ Y ___ N</td>
<td>6.</td>
<td>Continues to the Timer. The tutor continues to present math-fact cards for tutee response until the timer rings.</td>
</tr>
</tbody>
</table>
## Peer Tutoring in Math Computation: Intervention Integrity Sheet  
*(Part 2: Progress-Monitoring)*

### 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.

<table>
<thead>
<tr>
<th>Correctly Carried Out?</th>
<th>Step</th>
<th>Tutor Action</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Y</em> _N</td>
<td>1.</td>
<td>Presents Cards. The tutor presents each card to the tutee for 3 seconds.</td>
<td></td>
</tr>
<tr>
<td><em>Y</em> _N</td>
<td>2.</td>
<td>Remains Silent. The tutor does not provide performance feedback or praise to the tutee, or otherwise talk during the assessment phase.</td>
<td></td>
</tr>
<tr>
<td><em>Y</em> _N</td>
<td>3.</td>
<td>Sorts Cards. The tutor sorts cards into ‘correct’ and ‘incorrect’ piles based on the tutee’s responses.</td>
<td></td>
</tr>
<tr>
<td><em>Y</em> _N</td>
<td>4.</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
Peer Tutoring in Math Computation: Score Sheet

<table>
<thead>
<tr>
<th>Date</th>
<th>Cards Correct</th>
<th>Cards Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.


**Sample Self-Correction Checklist**

**Math Self-Correction Checklist**

<table>
<thead>
<tr>
<th>Student Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rater: Student</td>
<td>Classroom:</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th><strong>I underlined all numbers at the top of the subtraction problem that were smaller than their matching numbers at the bottom of the problem.</strong></th>
<th>Problem#1</th>
<th>Problem#2</th>
<th>Problem#3</th>
<th>Problem#4</th>
<th>Problem#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the student succeed in this behavior goal?</td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
</tr>
<tr>
<td>□ YES □ NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>I wrote all numbers carefully so that I could read them easily and not mistake them for other numbers.</strong></th>
<th>Problem#1</th>
<th>Problem#2</th>
<th>Problem#3</th>
<th>Problem#4</th>
<th>Problem#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the student succeed in this behavior goal?</td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
</tr>
<tr>
<td>□ YES □ NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>I lined up all numbers in the right place-value columns.</strong></th>
<th>Problem#1</th>
<th>Problem#2</th>
<th>Problem#3</th>
<th>Problem#4</th>
<th>Problem#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the student succeed in this behavior goal?</td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
</tr>
<tr>
<td>□ YES □ NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>I rechecked all of my answers.</strong></th>
<th>Problem#1</th>
<th>Problem#2</th>
<th>Problem#3</th>
<th>Problem#4</th>
<th>Problem#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the student succeed in this behavior goal?</td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
<td><em>Y</em></td>
</tr>
<tr>
<td>□ YES □ NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sample Strategy to Promote Writing/Syntax
Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
   a. Use parallel structure.*
   b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.

2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
   a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.
   b. Use a colon to introduce a list or quotation.
   c. Spell correctly.

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.


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 **yellow**.  
  **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 **upbeat**.  
  **Student-Generated Solution:** The **upbeat** economic forecast resulted in strong stock market gains.
### Response to Intervention

**Table 1: Sentence-combining types and examples** (Saddler, 2005; Strong, 1986)

<table>
<thead>
<tr>
<th>Type of Sentence</th>
<th>Sentence Combining Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple (Compound) Sentence Subjects or Objects:</strong></td>
<td></td>
</tr>
<tr>
<td>Two or more subjects can be combined with a conjunction (e.g., <em>or</em>, <em>and</em>).</td>
<td></td>
</tr>
<tr>
<td>Two or more direct or indirect objects can be combined with a conjunction (e.g., <em>or</em>, <em>and</em>).</td>
<td></td>
</tr>
</tbody>
</table>
| - Skyscrapers in the city were damaged in the hurricane.
  Bridges in the city were damaged in the hurricane.
  *Skyscrapers and bridges in the city were damaged in the hurricane.* |
| - When they travel, migratory birds need safe habitat.
  When they travel, migratory birds need **regular supplies of 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 embedded in the related sentence. |
| - Dry regions are at risk for chronic water shortages.
  *Overpopulated regions are at risk for chronic water shortages.*
  *Dry and overpopulated regions are at risk for chronic water shortages.* |
| - Health care costs have risen nationwide.
  Those health care costs have risen quickly.
  *Health care costs have risen quickly nationwide.* |
### Table 1: Sentence-combining types and examples (Saddler, 2005; Strong, 1986)

<table>
<thead>
<tr>
<th>Type of Sentence</th>
<th>Sentence Combining Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connecting Words</strong>:</td>
<td>- The house was falling apart. No one seemed to care. (but)</td>
</tr>
<tr>
<td></td>
<td><em>The house was falling apart, but no one seemed to care.</em></td>
</tr>
<tr>
<td></td>
<td>- The glacier began to melt. The earth’s average temperature increased. (because)</td>
</tr>
<tr>
<td></td>
<td><em>The glaciers began to melt because the earth’s average temperature increased.</em></td>
</tr>
<tr>
<td><strong>Relative Clauses</strong>:</td>
<td>- The artist was the most popular in the city. The artist painted watercolors of sunsets. (who)</td>
</tr>
<tr>
<td></td>
<td><em>The artist who painted watercolors of sunsets was the most popular in the city.</em></td>
</tr>
<tr>
<td><strong>Appositives</strong>:</td>
<td>- The explorer paddled the kayak across the raging river. The explorer was an expert in handling boats.</td>
</tr>
<tr>
<td></td>
<td><em>The explorer, an expert in handling boats, paddled the kayak across the raging river.</em></td>
</tr>
</tbody>
</table>

**Connecting Words**: One or more sentences are combined with connecting words.

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.

**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.
### Table 1: Sentence-combining types and examples (Saddler, 2005; Strong, 1986)

<table>
<thead>
<tr>
<th>Type of Sentence</th>
<th>Sentence Combining Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Possessive Nouns</strong>: A sentence that describes possession or ownership can be reduced to a possessive noun and embedded in another sentence.</td>
<td>Some historians view the Louisiana Purchase as the most important expansion of United States territory. The Louisiana Purchase was President Jefferson’s achievement. Some historians view President Jefferson’s Louisiana Purchase as the most important expansion of United States territory.</td>
</tr>
</tbody>
</table>
Group Activity:

**Reading/Writing/Math Interventions**

At your tables:

- Consider the reading-intervention ideas shared here.

- Discuss how you might use one or more of these strategies in your classroom.

**Interventions:**

1. Reading Racetrack (Vocabulary)
2. Assisted Cloze Reading (Fluency)
3. Paired Reading (Fluency)
4. HELPS Program (Fluency)
5. Group-Based Repeated Reading (Fluency)
6. Click or Clunk (Comprehension)
7. Cover-Copy-Compare (Math Computation)
8. Classroom Peer Tutoring in Math Computation
9. Math Self-Correction Checklists (Self-Monitoring)
10. Sentence Combining (Writing/Syntax)
Classroom Data Collection.
What are examples of how teachers can collect data to efficiently monitor growth in student skills?
Classroom Data Collection: Right Tools for the Job...

Classroom measures are ‘academic performance/student behavior’ detectors. They should therefore be:

– feasible for teachers to use
– valid and reliable measures of the academic performance/behavior being measured’
– sensitive to short-term student improvement
Interventions: The Essential Data Elements

1. **Clear problem definition:** ‘If you can’t name it, you can’t measure it.’

2. **Baseline data:** ‘If you don’t know the student’s starting point, you can’t know if that student has made progress with the intervention.’

3. **Intervention outcome goal:** ‘If you have no exit goal, you cannot judge if the intervention is successful—no matter how much data you collect.’

4. **Progress-monitoring plan:** ‘If you don’t actually collect the data, you are blind about the intervention outcome.’

<table>
<thead>
<tr>
<th>Intervention Target</th>
<th>Classroom Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics: Acquisition of Basic Skills</td>
<td>• Cumulative Mastery Log</td>
</tr>
<tr>
<td>Academics: Fluency in Basic Skills</td>
<td>• Curriculum-Based Measurement</td>
</tr>
<tr>
<td>Academics: Complex Skills</td>
<td>• Rubric</td>
</tr>
<tr>
<td>Academics: Survival Skills</td>
<td>• Academic Survival Skills Checklist</td>
</tr>
<tr>
<td>Behaviors</td>
<td>• Behavior Report Card</td>
</tr>
<tr>
<td></td>
<td>• Behavioral Frequency Count</td>
</tr>
<tr>
<td>Homework</td>
<td>• Gradebook Information: To measure homework completion and timely submission</td>
</tr>
<tr>
<td></td>
<td>• Quality: Percentage of work attempted</td>
</tr>
<tr>
<td></td>
<td>• Quality: Grades</td>
</tr>
<tr>
<td></td>
<td>• Quality: Rubric</td>
</tr>
</tbody>
</table>
Review of Selected Methods of Classroom Data Collection

1. Cumulative Mastery Logs
2. Behavior Report Cards
3. Curriculum-Based Measurement
1. Academics: Acquisition of Basic Skills

- **What to assess:** Basic academic skills are those 'building-block' skills that are the foundation for more advanced learning. When students are just acquiring basic skills, they often are expected to learn a finite set of items—such as letter sounds, multiplication math-facts 0-9, Dolch pre-primer sight word list, or 50 vocabulary terms necessary for success in a biology course. At this acquisition stage of learning, the teacher’s measurement objective is to monitor which items the student has mastered from the larger set.
1. Academics: Acquisition of Basic Skills

- **How to assess and where to find materials:**
  
  *Cumulative mastery log.* The teacher develops objective guidelines for judging that a student has mastered an item: e.g., "to know a math-fact, the student must answer the fact correctly from a flash-card within 3 seconds and repeat the feat twice in a row during a session".
1. Academics: Acquisition of Basic Skills

• **How to assess and where to find materials (Cont.):**

  *Cumulative mastery log.*

  Next, the teacher conducts a baseline assessment. That is, the instructor (1) reviews with the student all items in the larger pool (e.g., letters; multiplication math-facts 0-9, etc.)

  Using the previously developed guidelines for judging mastery, the teacher (2) identifies and (3) records those items that the student already knows at baseline. Then during the intervention, whenever the student masters an additional item, the teacher logs the item and date acquired.
### Academic Skills: Cumulative Mastery Log

**Student:**

**School Yr.:**

**Classroom/Course:**

#### 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 items for biology course):

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Item 11</th>
<th>Item 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 2</td>
<td>Item 12</td>
<td>Item 22</td>
</tr>
<tr>
<td>Item 3</td>
<td>Item 13</td>
<td>Item 23</td>
</tr>
<tr>
<td>Item 4</td>
<td>Item 14</td>
<td>Item 24</td>
</tr>
<tr>
<td>Item 5</td>
<td>Item 15</td>
<td>Item 25</td>
</tr>
<tr>
<td>Item 6</td>
<td>Item 16</td>
<td>Item 26</td>
</tr>
<tr>
<td>Item 7</td>
<td>Item 17</td>
<td>Item 27</td>
</tr>
<tr>
<td>Item 8</td>
<td>Item 18</td>
<td>Item 28</td>
</tr>
<tr>
<td>Item 9</td>
<td>Item 19</td>
<td>Item 29</td>
</tr>
<tr>
<td>Item 10</td>
<td>Item 20</td>
<td>Item 30</td>
</tr>
</tbody>
</table>

#### 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.")

#### 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.)

<table>
<thead>
<tr>
<th>Person completing the inventory:</th>
<th>Date</th>
</tr>
</thead>
</table>

(Online)

[www.interventioncentral.org](http://www.interventioncentral.org)
Cumulative Mastery Log p. 2
(Online)
1. Academics: Acquisition of Basic Skills

- **Goal-Setting:** *Cumulative mastery log.*
  In most cases, the teacher sets the goal of 100% mastery for the academic item sets that are tracked with mastery logs.
2. Behaviors

- **What to assess:** Classroom behaviors 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).
2. Behaviors

- **How to assess and where to find materials:**

  Behavior report card. 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 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.
Roy: Classroom Attention

Student Name: Roy
Date: ____________________________

Rater: Wright
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.

Roy spoke respectfully and complied with Mrs. Smith’s requests within 1 minute without argument or complaint.

Did Roy succeed in this behavior goal?
[ ] YES [ ] NO

Roy took notes on lecture content, capturing the essential information presented.

How well Roy did in meeting the behavior goal?
1............2............3
Poor Fair Good

Roy left his seat only with permission during academic periods.

The degree to which Roy met this behavior goal

1 2 3

Roy sat in class without fidgeting or squirming more than most peers.

Circle the degree to which Roy met the behavior goal?
1............2............3............4............5............6............7............8............9
Never/Seldom Sometimes Usually/Always

I have reviewed this completed Behavior Report with my child.

Parent Signature: ____________________________ Date: ____________________________

Comments:
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.
Roy's Report Card

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
Roy's Behavior 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.

Person to fill out the report card
Mr. Wright

Student's classroom
Room 345

Student's first and last name
Roy Atkins

Gender
Male

Font family
san serif

Font size
10 pt

Append signature section

Instructions for report card signer
I have reviewed this completed Behavior Report with my child.

Person to sign the report card
Parent

www.interventioncentral.org
2. Behaviors

- **Goal-Setting:** *Behavior Report Cards*

As BRCs are customized rating scales, the teacher selects a response format appropriate to the behavior. The teacher also selects a threshold for appropriate behavior, typically a behavior rating representative of ‘typical’ students in the classroom.

<table>
<thead>
<tr>
<th>Roy completed and turned in his assigned class work on time.</th>
<th>Mon__/<strong>/</strong></th>
<th>Tue__/<strong>/</strong></th>
<th>Wed__/<strong>/</strong></th>
<th>Thu__/<strong>/</strong></th>
<th>Fri__/<strong>/</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle the degree to which Roy met the behavior goal?</td>
<td>_____ Pts</td>
<td>_____ Pts</td>
<td>_____ Pts</td>
<td>_____ Pts</td>
<td>_____ Pts</td>
</tr>
<tr>
<td>1. 2. 3. 4. 5. 6. 7. 8. 9</td>
<td>Never</td>
<td>Seldom</td>
<td>Sometimes</td>
<td>Usually</td>
<td>Always</td>
</tr>
</tbody>
</table>
3. Academics: Fluency in Basic Skills

- **What to assess:** When a student has acquired basic academic skills, the next goal is often to build fluency in those skills.

Examples of fluency goals are increasing a student's oral reading speed and working toward automatic recall of math-facts. In this fluency stage of learning, the instructor's measurement objective is to continue to monitor accuracy while also tracking increasing speed of performance.
3. Academics: Fluency in Basic Skills

- **How to assess and where to find materials:**
  
  *Curriculum-based measurement.* A very useful way to assess a student's growing fluency (as well as accuracy) in foundation academic skills is via curriculum-based measurement (CBM) -- a family of quick assessments of basic academic skills. While CBM covers a wide range of different assessments, all are brief; timed; use standard procedures to prepare materials, administer, and score; and include decision rules to help educators to make appropriate instructional decisions (Hosp, Hosp & Howell, 2007).
<table>
<thead>
<tr>
<th>CBM</th>
<th>Skill Area</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral Reading Fluency</strong></td>
<td>Reading Fluency</td>
<td>1 Minute: Student <em>reads aloud</em> from a text passage.</td>
</tr>
<tr>
<td><strong>Reading Comprehension Fluency (Maze)</strong></td>
<td>Reading Comprehension</td>
<td>3 Minutes: Student <em>reads silently</em> from a Maze passage and selects correct word in each choice item that restores meaning to the passage.</td>
</tr>
<tr>
<td><strong>Computation Fluency</strong></td>
<td>Math Fact Fluency</td>
<td>2 Minutes: Student <em>completes math facts</em> and receives credit for each correct digit.</td>
</tr>
<tr>
<td><strong>Written Expression</strong></td>
<td>Mechanics/Conventions of Writing</td>
<td>4 Minutes: Student reads a story-starter (sentence stem), then <em>produces a writing sample</em> that can be scored for Total Words Written, Correctly Spelled Words, Correct Writing Sequences.</td>
</tr>
</tbody>
</table>
CBM Example: 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.
One day, I was in my boat and a storm came up and carried me to a desert island. To survive...
CBM Writing Assessment: Scoring

Total Words:

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

Total Words = 45
CBM-WE: Total Words Written [4 Minutes]. The student’s writing sample is scored for the total words written.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Fall TWW (Malecki &amp; Jewell, 2003)</th>
<th>Fall: +/-1 SD (≈16th%ile to 84th%ile)</th>
<th>Spring TWW (Malecki &amp; Jewell, 2003)</th>
<th>Spring: +/-1 SD (≈16th%ile to 84th%ile)</th>
<th>Weekly Growth (Tadatada, 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>3 ↔ 13</td>
<td>14</td>
<td>7 ↔ 21</td>
<td>0.45</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>14 ↔ 34</td>
<td>31</td>
<td>19 ↔ 43</td>
<td>0.43</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>23 ↔ 49</td>
<td>36</td>
<td>24 ↔ 48</td>
<td>0.35</td>
</tr>
<tr>
<td>4</td>
<td>41</td>
<td>30 ↔ 52</td>
<td>46</td>
<td>30 ↔ 62</td>
<td>0.25</td>
</tr>
<tr>
<td>5</td>
<td>51</td>
<td>34 ↔ 68</td>
<td>67</td>
<td>43 ↔ 91</td>
<td>--</td>
</tr>
<tr>
<td>6</td>
<td>44</td>
<td>31 ↔ 57</td>
<td>58</td>
<td>44 ↔ 72</td>
<td>--</td>
</tr>
</tbody>
</table>

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

Correctly Spelled Words = 39
• **CBM-WE: Correctly Spelled Words [4 Minutes].** The student’s writing sample is scored for the number of words spelled correctly.

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

CBM Writing Assessment: Scoring

Correct Writing Sequences:

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.

Correct Writing Sequences = 37
Response to Intervention

- **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.

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

Writing Probe Generator

Create a probe to assess the mechanics and conventions of student writing.

URL: http://www.interventioncentral.org/tools/writing-probe-generator
3. Academics: Fluency in Basic Skills

- **Goal-Setting:** *Curriculum-based measurement.* CBM measures typically are accompanied by research norms that allow the teacher to set student performance goals.
Response to Intervention

Activity: What Classroom Measures Will You Use?

- Review the 3 examples of classroom data collection shared in this workshop.
- Select one and discuss how you might use it in your classroom or school.

1. Cumulative Mastery Logs
2. Behavior Report Cards
3. Curriculum-Based Measurement (Written Expression)
**RTI Tiers.** What do the 3 levels, or ‘tiers’, of RTI look like and what students do they serve?
Definitions: **Differentiation**

“Differentiation refers to a wide variety of teaching techniques and lesson adaptations that educators use to instruct a diverse group of students, with diverse learning needs, in the same course, classroom, or learning environment. For example, teachers vary instructional strategies and use more flexibly designed lessons to engage student interests and address distinct learning needs—all of which may vary from student to student. ...The primary educational objectives—making sure all students master essential knowledge, concepts, and skills—remain the same for every student, but teachers may use different instructional methods to help students meet those expectations.”

Definitions: **Academic Intervention**

Academic intervention is defined as **individualized instruction** provided for a **sustained period of time** (e.g., several weeks) to help a **student** who lacks **essential grade-appropriate academic skills**.

Interventions can be provided to individuals and also to groups of students—provided that these students all share the same academic deficit.

Interventions can target:

- basic skills (e.g., sight-word vocabulary; math facts; spelling)
- cognitive skills (e.g., step-by-step math problem-solving procedures)
- general academic survival skills (e.g., organization or study skills)
RTI: Tier 1 Core Instruction

Focus of Inquiry: Because it benefits all students and is the most efficient way to improve academic skills, core instruction is the most important element of RTI.
Response to Intervention (RTI)

**ACADEMIC RTI**

**Tier 1: Universal Core Instruction: 80%**
- Effective group instruction
- Universal academic screening
- Academic interventions for struggling students

**Tier 2: At-Risk Students: 15%**
- Small-group interventions to address off-grade-level academic deficits
- Regular progress-monitoring

**Tier 3: High-Risk Students: 5%**
- Diagnostic assessment of academic problems
- RTI Team Meetings
- Customized/intensive academic intervention plan
- Daily progress-monitoring

**BEHAVIORAL RTI**

**Tier 1: Universal: Classroom Management: 80%**
- Clear behavioral expectations
- Effective class-wide management strategies
- Universal behavior screening

**Tier 2: At-Risk Students: 15%**
- Small-group interventions for emerging behavioral problems
- Regular progress-monitoring

**Tier 3: High-Risk Students: 5%**
- Functional Behavioral Assessments (FBAs)
- Behavior Intervention Plans (BIPs)
- Wrap-around RTI Team meetings
- Daily progress-monitoring

RTI Plan: Tier 1 Core Instruction

Tier 1: High-Quality Core Instruction. The student receives high-quality core instruction in the area of academic concern. ‘High quality’ is defined as at least 80% of students in the classroom or grade level performing at or above grade-wide academic screening benchmarks through classroom instructional support alone (Christ, 2008).
**How To: Implement Strong Core Instruction**

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

<table>
<thead>
<tr>
<th>Instructional Element</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Match. Lesson content is appropriately matched to students’ abilities</td>
<td>(Burns, VanDerHeyden, &amp; Boice, 2008).</td>
</tr>
<tr>
<td>Content Review at Lesson Start. The lesson opens with a brief review of concepts or material that have previously been presented.</td>
<td>(Burns, VanDerHeyden, &amp; Boice, 2008, Rosenshire, 2008).</td>
</tr>
<tr>
<td>Preview of Lesson Goal(s). At the start of instruction, the goals of the current day’s lesson are shared</td>
<td>(Rosenshire, 2008).</td>
</tr>
<tr>
<td>Chunking of New Material. The teacher breaks new material into small, manageable increments, ‘chunks’, or steps</td>
<td>(Rosenshire, 2008).</td>
</tr>
</tbody>
</table>

### 2. Provided ‘Scaffolding’ Support

<table>
<thead>
<tr>
<th>Instructional Element</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed Explanations &amp; Instructions. Throughout the lesson, the teacher provides adequate explanations and detailed instructions for all concepts and materials being taught.</td>
<td>(Burns, VanDerHeyden, &amp; Boice, 2008).</td>
</tr>
<tr>
<td>Think-Alouds/Talk-Alouds. 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 ‘think-alouds’ (e.g., the teacher applies a cognitive strategy to a particular problem or task and verbalizes the steps in applying the strategy)</td>
<td>(Burns, VanDerHeyden, &amp; Boice, 2008, Rosenshire, 2008).</td>
</tr>
<tr>
<td>Work Models. The teacher makes exemplars of academic work (e.g., essays, completed math word problems) available to students for use as models</td>
<td>(Rosenshire, 2008).</td>
</tr>
<tr>
<td>Active Engagement. The teacher ensures that the lesson engages the student in ‘active accurate responding’ (Skinner, Pappas &amp; Davis, 2005) often enough to capture student attention and to optimize learning.</td>
<td></td>
</tr>
</tbody>
</table>
How To Implement Strong Core Instruction

*Increase Access to Instruction*

1. **Instructional Match.** Lesson content is appropriately matched to students' abilities (Burns, VanDerHeyden, & Boice, 2008).

2. **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).
How To Implement Strong Core Instruction

Increase Access to Instruction

3. **Preview of Lesson Goal(s).** At the start of instruction, the goals of the current day’s lesson are shared (Rosenshine, 2008).

4. **Chunking of New Material.** The teacher breaks new material into small, manageable increments, 'chunks', or steps (Rosenshine, 2008).
How To Implement Strong Core Instruction

Provide ‘Scaffolding’ Support

1. **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).

2. **Talk-Alouds/Think-Alouds.** Verbal explanations are given to explain cognitive strategies: ‘talk-alouds’ (e.g., the teacher describes and explains each step of a cognitive strategy) and ‘think-alouds’ (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).
How To Implement Strong Core Instruction

Provide ‘Scaffolding’ Support

3. **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).

4. **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 learning.
How To Implement Strong Core Instruction

*Provide ‘Scaffolding’ Support*

5. **Collaborative Assignments.** Students have frequent opportunities to work collaboratively—in pairs or groups. (Baker, Gersten, & Lee, 2002; Gettinger & Seibert, 2002).

6. **Checks for Understanding.** The instructor regularly checks for student understanding by posing frequent questions to the group (Rosenshine, 2008).
How To Implement Strong Core Instruction

Provide ‘Scaffolding’ Support

7. **Group Responding.** The teacher ensures full class participation and boosts levels of student attention by having all students respond in various ways (e.g., choral responding, response cards, white boards) to instructor questions (Rosenshine, 2008).

8. **High Rate of Student Success.** The teacher verifies that students are experiencing at least 80% success in the lesson content to shape their learning in the desired direction and to maintain student motivation and engagement (Gettinger & Seibert, 2002).
How To Implement Strong Core Instruction

Provide ‘Scaffolding’ Support

9. **Brisk Rate of Instruction.** The lesson moves at a brisk rate—sufficient to hold student attention (Carnine, 1976; Gettinger & Seibert, 2002).

10. **Fix-Up Strategies.** Students are taught fix-up strategies (Rosenshine, 2008) for use during independent work (e.g., for defining unknown words in reading assignments, for solving challenging math word problems).
How To Implement Strong Core Instruction

**Give Timely Performance Feedback**

1. **Regular Feedback.** The teacher provides timely and regular performance feedback and corrections throughout the lesson as needed to guide student learning (Burns, VanDerHeyden, & Boice).

2. **Step-by-Step Checklists.** For multi-step cognitive strategies, the teacher creates checklists for students to use to self-monitor performance (Rosenshine, 2008).
How To Implement Strong Core Instruction

Provide Opportunities for Review & Practice

1. **Spacing of Practice Throughout Lesson.** The lesson includes practice activities spaced throughout the lesson. (e.g., through teacher demonstration; then group practice with teacher supervision and feedback; then independent, individual student practice) (Burns, VanDerHeyden, & Boice).
How To Implement Strong Core Instruction

*Provide Opportunities for Review & Practice*

2. **Guided Practice.** When teaching challenging material, the teacher provides immediate corrective feedback to each student response. When the instructor anticipates the possibility of an incorrect response, that teacher forestalls student error through use of cues, prompts, or hints. The teacher also tracks student responding and ensures sufficient success during supervised lessons before having students practice the new skills or knowledge independently (Burns, VanDerHeyden, & Boice, 2008).
3. **Support for Independent Practice.** The teacher ensures that students have adequate support (e.g., clear and explicit instructions; teacher monitoring) to be successful during independent seatwork practice activities (Rosenshine, 2008).

4. **Distributed Practice.** The teacher reviews previously taught content one or more times over a period of several weeks or months (Pashler et al., 2007; Rosenshine & Stevens, 1995).
Activity: Core Instruction Fidelity Checks

- Lembke et al (2012) recommend that schools periodically use teacher self-, collegial, or administrative checks to ensure that strong explicit core instruction is occurring in classes.

- Discuss how your school could use a ‘core instruction’ checklist like the one just reviewed to ensure strong Tier 1 (core) instruction across all classrooms.

RTI: Decision Points and Quality Indicators

The next 3 sections of this presentation summarize RTI at each intervention tier as:

• ‘Decision points’: People looking at data, talking about individual student needs, deciding what intervention supports those students need, designing intervention plans for those students.

• ‘Quality indicators’: The elements that must be in place to ensure quality interventions.
RTI: Tier 1 General-Education Classroom Intervention

Focus of Inquiry: Because the teacher is the Tier 1 (classroom) RTI ‘first responder’ who can potentially assist any struggling student, schools should prepare necessary resources and define clear guidelines for how to implement Tier 1 interventions.
Tier 1: Teacher Consultation/Team

• At Tier 1, problem-solving occurs when the teacher meets briefly with a team (e.g., grade-level team, instructional team, department) or a consultant.

• The teacher defines the student problem(s), selects intervention(s), decides how to monitor the intervention, and documents the intervention plan—with the guidance of the team or consultant.

• The teacher meets again with team or consultant several weeks later to check on the status of the intervention.

• The classroom teacher is the person primarily responsible for the integrity of the Tier 1 intervention plan.

• The numbers of students requiring Tier 1 interventions depends on district decision-rules defining classroom ‘at-risk’ status.
How To: Create a Written Record of Classroom Interventions (Online)
Creating a Written Record of Classroom Interventions: Form

- **Case information.** The opening section of the form includes general information about the case, including:
  - Target student
  - Teacher/interventionist
  - Date of the intervention plan
  - Start and end dates for the intervention
  - Description of the student problem to be addressed

### Case Information

**What to Write:** Record the important case information, including student, person delivering the intervention, date of plan, start and end dates for the intervention plan, and the total number of instructional weeks that the intervention will run.

<table>
<thead>
<tr>
<th>Student:</th>
<th>Interventionist(s):</th>
<th>Date Intervention Plan Was Written:</th>
<th>Date Intervention is to Start:</th>
<th>Date Intervention is to End:</th>
<th>Total Number of Intervention Weeks:</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>John Samuelson-Gr 4</em></td>
<td><em>Mrs. Kennedy, classroom teacher</em></td>
<td><em>10 October 2012</em></td>
<td><em>M 8 Oct 2012</em></td>
<td><em>F 16 Nov 2012</em></td>
<td><em>6 weeks</em></td>
</tr>
<tr>
<td>Description of the Student Problem:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow math computation speed (computes multiplication facts at 12 correct digits in 2 minutes, when typical gr 4 peers compute at least 24 correct digits).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Creating a Written Record of Classroom Interventions: Form

- **Intervention.** The teacher describes the evidence-based intervention(s) that will be used to address the identified student concern(s). As a shortcut, the instructor can simply write the intervention name in this section and attach a more detailed intervention script/description to the intervention plan.

<table>
<thead>
<tr>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What to Write:</strong> Write a brief description of the intervention(s) to be used with this student. TIP: If you have a script for this intervention, you can just write its name here and attach the script to this sheet.</td>
</tr>
<tr>
<td><em>Math Computation Time Drill (Rhymer et al., 2002)</em> - See attached description</td>
</tr>
</tbody>
</table>
Creating a Written Record of Classroom Interventions: Form

- **Materials.** The teacher lists any materials (e.g., flashcards, wordlists, worksheets) or other resources (e.g., Internet-connected computer) necessary for the intervention.

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What to Write:</strong> Jot down materials (e.g., flashcards) or resources (e.g., Internet-connected computer) needed to carry out this intervention.</td>
</tr>
<tr>
<td><strong>Use:</strong> math worksheet generator on <a href="http://www.interventioncentral.org">www.interventioncentral.org</a> to create all time-drill and assessment materials.</td>
</tr>
</tbody>
</table>
Creating a Written Record of Classroom Interventions: Form

- **Training.** If adults and/or the target student require any training prior to the intervention, the teacher records those training needs in this section of the form.

<table>
<thead>
<tr>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What to Write:</strong> Note what training—if any—is needed to prepare adult(s) and/or the student to carry out the intervention.</td>
</tr>
<tr>
<td>Meet with the student at least once before the intervention to familiarize with the time-drill technique and timed math computation assessments.</td>
</tr>
</tbody>
</table>
Creating a Written Record of Classroom Interventions: Form

• *Progress-Monitoring.* The teacher selects a method to monitor student progress during the intervention, to include:
  - what type of data is to be used
  - collects and enters student baseline (starting-point) information
  - calculates an intervention outcome goal
  - The frequency that data will be collected.

<table>
<thead>
<tr>
<th>Progress-Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What to Write:</strong> Select a method to monitor student progress on this intervention. For the method selected, record what type of data is to be used, enter student baseline (starting-point) information, calculate an intervention outcome goal, and note how frequently you plan to monitor the intervention. Tip: Several ideas for classroom data collection appear on the right side of this table.</td>
</tr>
<tr>
<td><strong>Type of Data Used to Monitor:</strong> Curriculum-based measurement: math computation assessments: 2 minute single-skill probes</td>
</tr>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>12 correct digits per 2 minute probe</td>
</tr>
<tr>
<td><strong>How often will data be collected?</strong> (e.g., daily, every other day, weekly):</td>
</tr>
<tr>
<td>WEEKLY</td>
</tr>
<tr>
<td><strong>Ideas for Intervention Progress-Monitoring</strong></td>
</tr>
<tr>
<td>• Existing data: grades, homework logs, etc.</td>
</tr>
<tr>
<td>• Cumulative mastery log</td>
</tr>
<tr>
<td>• Rubric</td>
</tr>
<tr>
<td>• Curriculum-based measurement</td>
</tr>
<tr>
<td>• Behavior reportcard</td>
</tr>
<tr>
<td>• Behavior checklist</td>
</tr>
</tbody>
</table>
**How To: Create a Written Record of Classroom Interventions**

### Classroom Intervention Planning Sheet: Math Computation Example

This worksheet is designed to help teachers quickly create classroom plans for academic and behavioral interventions. (For a tutorial on how to fill out this sheet, review the accompanying directions.)

#### Case Information
- **Student:** John Samuelson-Gr 4
- **Interventionist(s):** Mrs. Kennedy, classroom teacher
- **Date Intervention Plan Was Written:** 10 October 2012
- **Date Intervention is to Start:** 8 Oct 2012
- **Date Intervention is to End:** 16 Nov 2012
- **Total Number of Intervention Weeks:** 6 weeks

#### Description of the Student Problem:
Slow math computation speed (computes multiplication facts at 12 correct digits in 2 minutes, when typical gr 4 peers compute at least 24 correct digits).

#### Intervention
- **What to Write:** Write a brief description of the intervention(s) to be used with the student. TIP: If you have a script for the intervention, you can just write its name here and attach the script to the sheet.

**Math Computation Time Drill (Rhymer et al., 2002)**
- Exploit time-drills are a method to boost students’ rate of responding on arithmetic-focused worksheets: (1) The teacher hands out the worksheet. Students are instructed that they will have 3 minutes to work on problems on the sheet. (2) The teacher starts the stopwatch and tells the students to start work. (3) At the end of the first minute of the 3-minute span, the teacher calls “time”, stops the stopwatch, and tells the students to underline the last number written and to put their pencils in the air. Then students are told to resume work and the teacher resets the stopwatch. (4) This process is repeated at the end of minutes 2 and 3. (5) At the conclusion of the 3 minutes, the teacher collects the student worksheets.

#### Materials
- **What to Write:** Jot down materials (e.g., flashcards) or resources (e.g., Internet-connected computer) needed to carry out the intervention.
- Use math worksheet generator on www.interventioncentral.org to create all time-drill and assessment materials.

#### Training
- **What to Write:** Note what training—like any—needed to prepare adult(s) and/or the student to carry out the intervention.
- Meet with the student at least once before the intervention to familiarize and practice the time-drill technique and timed math computation assessments.

#### Progress-Monitoring
- **What to Write:** Select a method to monitor student progress on the intervention. For the method selected, record what type of data is to be used, enter student baseline (starting-point) information, calculate an intervention outcome goal, and note how frequently you plan to monitor the intervention. TIP: Several ideas for classroom data collection appear on the right side of the table.

<table>
<thead>
<tr>
<th>Type of Data Used to Monitor</th>
<th>Ideas for Intervention Progress-Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular-based measurement</td>
<td>• Excluding data: grades, homework logs, etc.</td>
</tr>
<tr>
<td>Math computation assessments</td>
<td>• Cumulative mastery log</td>
</tr>
<tr>
<td>2 minute single-skill probes</td>
<td>• Rubrics</td>
</tr>
<tr>
<td>Baseline: 12 correct digits per 2 minute probe</td>
<td>• Curriculum-based measurement</td>
</tr>
<tr>
<td>Outcome Goal: 24 correct digits per 2 minute probe</td>
<td>• Behavior report card</td>
</tr>
<tr>
<td>How often will data be collected? (e.g., daily, every other day, weekly): WEEKLY</td>
<td>• Behavior checklist</td>
</tr>
</tbody>
</table>
RTI: Tier 2 Supplemental Intervention

Focus of Inquiry: Tier 2 interventions occur above and beyond core instruction, usually in small-group format. Tier 2 interventions are often ‘standard-protocol’ programs that match common student intervention needs in a school.
ACADEMIC RTI

Tier 1: Universal: Core Instruction: 80%
- Effective group instruction
- Universal academic screening
- Academic interventions for struggling students

Tier 2: At-Risk Students: 15%
- Small-group interventions to address off-grade-level academic deficits
- Regular progress-monitoring

Tier 3: High-Risk Students: 5%
- Diagnostic assessment of academic problems
- RTI Team Meetings
- Customized/intensive academic intervention plan
- Daily progress-monitoring

BEHAVIORAL RTI

Tier 1: Universal: Classroom Management: 80%
- Clear behavioral expectations
- Effective class-wide management strategies
- Universal behavior screening

Tier 2: At-Risk Students: 15%
- Small-group interventions for emerging behavioral problems
- Regular progress-monitoring

Tier 3: High-Risk Students: 5%
- Functional Behavioral Assessments (FBAs)
- Behavior Intervention Plans (BIPs)
- Wrap-around RTI Team meetings
- Daily progress-monitoring

Tier 2/3 Interventions: Quality Indicators

Each Tier 2/3 intervention plan shows evidence that:

- Instructional programs or practices are ‘evidence-based’.
- The intervention has been selected because it logically addressed the area(s) of academic deficit for the target student (e.g., an intervention to address reading fluency was chosen for a student whose primary deficit was in reading fluency).
- All students enrolled in the Tier 2/3 intervention group have the same shared intervention need.
- The student-teacher ratio in the group provides adequate student support: Tier 2 up to 7 students; Tier 3 up to 3 students.
- The intervention provides contact time adequate to the student academic deficit. Tier 2 interventions occur a minimum of 3-5 times per week in sessions of 30 mins or more; Tier 3 interventions occur daily in sessions of 30 mins or more (Burns & Gibbons, 2008).

www.interventioncentral.org
Scheduling Elementary Tier 2 Interventions

Option 3: ‘Floating RTI’: Gradewide Shared Schedule. Each grade has a scheduled RTI time across classrooms. No two grades share the same RTI time. Advantages are that outside providers can move from grade to grade providing push-in or pull-out services and that students can be grouped by need across different teachers within the grade.

Anyplace Elementary School: RTI Daily Schedule

<table>
<thead>
<tr>
<th>Grade</th>
<th>Classroom 1</th>
<th>Classroom 2</th>
<th>Classroom 3</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade K</td>
<td>Classroom 1</td>
<td>Classroom 2</td>
<td>Classroom 3</td>
<td>9:00-9:30</td>
</tr>
<tr>
<td>Grade 1</td>
<td>Classroom 1</td>
<td>Classroom 2</td>
<td>Classroom 3</td>
<td>9:45-10:15</td>
</tr>
<tr>
<td>Grade 2</td>
<td>Classroom 1</td>
<td>Classroom 2</td>
<td>Classroom 3</td>
<td>10:30-11:00</td>
</tr>
<tr>
<td>Grade 3</td>
<td>Classroom 1</td>
<td>Classroom 2</td>
<td>Classroom 3</td>
<td>12:30-1:00</td>
</tr>
<tr>
<td>Grade 4</td>
<td>Classroom 1</td>
<td>Classroom 2</td>
<td>Classroom 3</td>
<td>1:15-1:45</td>
</tr>
<tr>
<td>Grade 5</td>
<td>Classroom 1</td>
<td>Classroom 2</td>
<td>Classroom 3</td>
<td>2:00-2:30</td>
</tr>
</tbody>
</table>

What Works Clearinghouse
http://ies.ed.gov/ncee/wwc/

This website reviews core instruction and intervention programs in reading/writing, as well as other academic areas.

The site reviews existing studies and draws conclusions about whether specific intervention programs show evidence of effectiveness.
Best Evidence Encyclopedia
http://www.bestevidence.org/

This site provides reviews of evidence-based reading and math programs.

The website is sponsored by the Johns Hopkins University School of Education's Center for Data-Driven Reform in Education (CDDRE).
National Center on Intensive Intervention Academic Intervention Tools Chart
http://www.intensiveintervention.org/chart/instructional-intervention-tools

Sponsored by the National Center on Intensive Intervention, this page provides ratings to intervention programs in reading, math, and writing.

Users can streamline their search by subject and grade level (elementary or middle school).
Planning Tier 2 Interventions: Data Analysis Team

The school has established a Data Analysis Team at Tier 2 to evaluate the school-wide screening data collected three times per year and to place students who need Tier 2 interventions.

The Data Analysis Team

- is knowledgeable of all intervention personnel and evidence-based programs available for Tier 2 interventions.
- knows how to identify students who have failed to meet expected screening benchmarks
- can use the benchmarks to estimate the risk for academic failure of each student picked up in the screening
- is able to match identified students to appropriate interventions while providing students with sufficient instructional support.
- can document the Tier 2 intervention set up for each student
Response to Intervention

**RTI: Tier 3 Intensive Intervention**

**Focus of Inquiry:** General-education students who receive Tier 3 services take up the greatest amount of RTI resources and are at risk for referral to special education if they fail to improve. So these high-stakes cases require the RTI Problem-Solving Team, which follows a customized, team-based ‘problem-solving’ approach.

www.interventioncentral.org
Response to Intervention

Response to Intervention

Tier 3: RTI Problem-Solving Team

- At Tier 3, the RTI Problem-Solving Team (‘RTI Team’) meets on students with intensive academic or behavioral needs to develop customized intervention plans. NOTE: The RTI Team is equivalent to the NJ Intervention & Referral Services (I&RS) Team.
- The RTI Team is prepared to develop Tier 3 plans for up to 5 percent of students in a school.
- RTI Team meetings follow a version of the investigative ‘problem-solving’ consultation model (e.g., Bergan, 1995)—to include:
  - Problem Identification
  - Problem Analysis
  - Plan Development and Implementation
  - Problem Evaluation

Tier 3 Interventions: ‘Problem-Solving’ Approach

Schools define Tier 3 interventions in one of two ways:

1. **Failure to Respond to Lesser Interventions.** The student requires an intervention sufficiently intensive (e.g., group size of 3 or fewer; daily sessions of 30 minutes or more) to qualify as Tier 3, or

2. **Case Complexity.** The student has multiple factors (e.g., academic and behavioral) that demand immediate attention, and require an open-ended problem-solving approach.

The RTI Problem-Solving Team is the appropriate group to oversee Tier 3 interventions, (1) ensuring fair access to intensive resources and (2) having the breadth of knowledge to design unique, customized interventions.
Team Roles

• Coordinator
• Facilitator
• Recorder
• Time Keeper
• Case Manager
RTI Problem-Solving Team Agenda

**Step 1:** Assess Teacher Concerns

**Step 2:** Inventory Student Strengths/Talents

**Step 3:** Review Background/Baseline Data

**Step 4:** Select Target Teacher Concerns

**Step 5:** Set Academic and/or Behavioral Outcome Goals and Methods for Progress-Monitoring

**Step 6:** Design an Intervention Plan

**Step 7:** Plan How to Share Meeting Information with the Student’s Parent(s)

**Step 8:** Review Intervention & Monitoring Plans
Activity: RTI: Questions

- In your groups, discuss the RTI model presented at this workshop.
- What questions do you still have about RTI at the elementary school level?
Activity: ‘Next Steps’ Planning

- Review the components of RTI and classroom interventions discussed at today’s workshop (next slide).
- Come up with a plan to use 2-3 key workshop ideas, strategies, or tools immediately in your classroom or school.
- Be prepared to report out!
Response to Intervention

Teacher as Classroom First Responder: A Mosaic

- Understanding of the Response to Intervention Model
- Collection of Data to Monitor Student Intervention Progress
- Documentation of Intervention Plans
- Strong Core Instruction
- Proactive Classwide Management Strategies
- Research-Based Academic & Behavioral Intervention Strategies

www.interventioncentral.org