The Teacher as ‘First Responder’: Creating Academic-Intervention Plans to Motivate Learners in Grades 3-12

Jim Wright
www.interventioncentral.org
Intervention Central
www.interventioncentral.org

Response To Intervention – RTI Resources

Products
- RTI Data Collection Forms & Organizer

Latest Updates
September 17th, 2013
How To: Reduce Time-Outs With Active Response Beads
Active Response Beads—Time Out replaces in-class time out, promotes students’ use of calm-down strategies, enhances behavioral self-management skills, and minimizes exclusion from academic activities.
Read more...

[29 Nov 2013] Building Sight-Word Vocabulary: 4 Methods. Rapid recognition of sight words is a key foundation skill that supports the development of reading fluency. Review these four quick and efficient tutoring interventions that promote student acquisition of common sight words.


Featured Tools
- Academic Intervention Planner for Struggling Students
- Behavior Intervention Planner
- Behavior Rating Scales Report Card Maker
- ChartDog Graph Maker
- Dolch Wordlist Fluency Generator
- Early Math Fluency Generator
- Learning Disability Accommodations Finder
- Letter Name Fluency Generator
- Math Work – Math Worksheet Generator
- Reading Fluency Passages Generator
- Student Academic Success Strategies + Checklist Maker

Intervention Central provides teachers, schools and districts with free resources to help struggling learners and implement Response to Intervention and attain the Common Core State Standards. Spread the word about ICI!
RTI/MTSS Classroom Teacher Toolkit
The Teacher as ‘First Responder’: Creating Academic-Intervention Plans to Motivate Learners in Grades 3-12
Jim Wright, Presenter

16 October 2019
Southern Westchester BOCES
Harrison, NY

Email: jimw13159@gmail.com
Workshop Materials: http://www.interventioncentral.org/academic
Workshop PPTs and handout available at:

http://www.interventioncentral.org/academic
RTI/MTSS for Academics: An Overview. What does the RTI/MTSS model look like?
Response to Intervention

RTI/MTSS for Academics:

Pyramid of Interventions

Tier 1: Core Instruction (100%). Teachers in all classrooms deliver effective instruction to reach the widest range of learners.
Tier 1: Core Instruction. The teacher’s whole-group instruction...

...maximizes time devoted to instruction by reducing or avoiding interruptions—e.g., overlong transitions, episodes of problem behavior, etc.

...incorporates essential elements of explicit and systematic instruction into lessons.

...provides differentiated instruction matched to student needs.

...for reading and mathematics instruction, uses programs and/or practices supported by research.
RTI/MTSS for Academics:
Pyramid of Interventions

Tier 1: Core Instruction

Tier 1: Classroom Academic Interventions

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

- Has access to a bank of academic intervention ideas and data-collection methods accessible by all staff.
- Uses standardized form(s) to record classroom interventions.
- Defines the student’s presenting academic problem(s) in clear and specific terms.
- Selects method(s) to monitor student progress, setting a goal and collecting baseline data.
- Chooses appropriate academic intervention(s) supported by research.

www.interventioncentral.org
RTI/MTSS for Academics: Pyramid of Interventions

- **Tier 1: Core Instruction**
- **Tier 1: Classroom Academic Interventions**
- **Tier 2: Strategic Intervention (10-15%)**

Students with off-grade-level skill deficits receive supplemental small-group interventions outside of core instruction to fill in those gaps. Interventions used are research-based.
Tier 2: Supplemental Intervention. At Tier 2,...

- students enter and exit Tier 2 services based primarily on the objective data of the school-wide screening tool(s) (e.g., 20-25th% or below), with teacher nomination as only a minor source of recruitment.

- interventions are documented in writing before Tier 2 services begin, and Tier 2 plans are archived electronically for easy access.

- the interventionist employs academic programs or practices supported by research.

- the interventionist collects progress-monitoring data at least twice per month to monitor the success of the intervention.

- interventions seek to fix ‘off-grade-level’ academic deficits—and are not simply a reteaching of classroom instruction.
RTI/MTSS for Academics: Pyramid of Interventions

Tier 1: Core Instruction
Tier 1: Classroom Academic Interventions
Tier 2: Strategic
Tier 3: Intensive

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

Tier 3: Intensive Intervention. The RTI Problem-Solving Team...

- Meets on referred students within 1-2 weeks of initial referral.

- Follows a standardized problem-solving meeting format, with defined meeting roles and steps.

- Routinely schedules follow-up meetings 6-8 instructional weeks after the initial meeting to evaluate intervention outcomes.

- Produces a written record of RTI /MTSS Team meeting discussion, including a customized intervention plan.

- Expects that providers of Tier 3 interventions will collect data at least weekly to monitor student progress.

www.interventioncentral.org
Strong Classroom Instruction. What are the elements of effective whole-group direct instruction? pp. 3-5
RTI: Tier 1: Core Instruction

- Strong core instruction is the foundation of RTI.

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

  Strong instruction includes making optimal use of instructional time, integrating direct-instruction elements into lessons, and providing accommodations & supports as appropriate.
RTI: Tier 1: Core Instruction: **Direct Instruction**

Teachers can strengthen their lessons by incorporating into them elements of direct instruction.
<table>
<thead>
<tr>
<th>How to: Implement Strong Core Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Access to Instruction</strong></td>
</tr>
<tr>
<td>- Instructional Match</td>
</tr>
<tr>
<td>- Content Review at Lesson Start</td>
</tr>
<tr>
<td>- Preview of Lesson Goal(s)</td>
</tr>
<tr>
<td>- Chunking of New Material</td>
</tr>
<tr>
<td><strong>2. ‘Scaffolding’ Support</strong></td>
</tr>
<tr>
<td>- Detailed Explanations &amp; Instructions</td>
</tr>
<tr>
<td>- Talk Alouds/Think Alouds</td>
</tr>
<tr>
<td>- Work Models</td>
</tr>
<tr>
<td>- Active Engagement</td>
</tr>
<tr>
<td>- Collaborative Assignments</td>
</tr>
<tr>
<td>- Checks for Understanding</td>
</tr>
<tr>
<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

<table>
<thead>
<tr>
<th>1. Access to Instruction</th>
<th>2. ‘Scaffolding’ Support (Cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Instructional Match</td>
<td>☐ Group Responding</td>
</tr>
<tr>
<td>☐ Content Review at Lesson Start</td>
<td>☐ High Rate of Student Success</td>
</tr>
<tr>
<td>☐ Preview of Lesson Goal(s)</td>
<td>☐ Brisk Rate of Instruction</td>
</tr>
<tr>
<td>☐ Chunking of New Material</td>
<td>☐ Fix-Up Strategies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. ‘Scaffolding’ Support</th>
<th>3. Timely Performance Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Detailed Explanations &amp; Instructions</td>
<td>☐ Regular Feedback</td>
</tr>
<tr>
<td>☐ Talk Alouds/Think Alouds</td>
<td>☐ Step-by-Step Checklists</td>
</tr>
<tr>
<td>☐ Work Models</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Opportunities for Review/ Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Active Engagement</td>
</tr>
<tr>
<td>☐ Collaborative Assignments</td>
</tr>
<tr>
<td>☐ Checks for Understanding</td>
</tr>
<tr>
<td>☐ Spacing of Practice Throughout Lesson</td>
</tr>
<tr>
<td>☐ Guided Practice</td>
</tr>
<tr>
<td>☐ Support for Independent Practice</td>
</tr>
<tr>
<td>☐ Distributed Practice</td>
</tr>
</tbody>
</table>
Motivating Students Through Collaboration: Numbered Heads Together

The Need. Teacher questioning during whole-group instruction is a key way for instructors to monitor student understanding of content. When questioning:

- instructors should use a mix of closed-response queries (i.e., limited number of correct responses) and open-response questions (i.e., wide range of acceptable answers, opinions, or judgments).
- students should have enough wait-time to formulate an adequate answer,
- the teacher should provide targeted performance feedback (Maheady et al., 2006).
• **Solution.** Numbered Heads Together is an instructional technique build upon peer collaboration that provides the supports and structure necessary to promote effective teacher questioning and student responding (Maheady et al., 2006). This technique can be useful for students with emotional/behavioral disorders (EBD) (Hunter & Haydon, 2013).
Motivating Students Through Collaboration: Numbered Heads Together

Procedure: During whole-group instruction, Numbered Heads Together is implemented using the following steps:

1. Create teams. The teacher divides the class into 4-person teams. Ideally, each team includes a mix of high, average, and low-achieving students. Students in each team assign themselves the numbers 1 through 4. (Note: If a team has only 3 members, one student takes two numbers: 3 and 4.)
Motivating Students Through Collaboration: Numbered Heads Together

2. **State a question.** The teacher poses separate queries to the class. After each question, the instructor tells students to "put your heads together, think of the best answer you can, and make sure that everybody in your group knows that answer."

3. **Allow think-time.** The teacher gives students 30 seconds to discuss an answer in their groups.
4. **Elicit student responses.** The teacher randomly selects a number from 1-4 and says, "All number [1, 2, 3, or 4] students who know the answer, raise your hand." The teacher then calls on one student with hand raised and asks him or her to give the answer. The teacher next says, "How many [1, 2, 3, or 4] students think that that answer is correct? Raise your hand." [Optional: The teacher can call on additional students with hand raised to elaborate on a previous student's answer.]
<table>
<thead>
<tr>
<th>How to: Implement Strong Core Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Access to Instruction</strong></td>
</tr>
<tr>
<td>- Instructional Match</td>
</tr>
<tr>
<td>- Content Review at Lesson Start</td>
</tr>
<tr>
<td>- Preview of Lesson Goal(s)</td>
</tr>
<tr>
<td>- Chunking of New Material</td>
</tr>
<tr>
<td><strong>2. ‘Scaffolding’ Support (Cont.)</strong></td>
</tr>
<tr>
<td>- Group Responding</td>
</tr>
<tr>
<td>- High Rate of Student Success</td>
</tr>
<tr>
<td>- Brisk Rate of Instruction</td>
</tr>
<tr>
<td>- Fix-Up Strategies</td>
</tr>
<tr>
<td><strong>3. ‘Scaffolding’ Support</strong></td>
</tr>
<tr>
<td>- Detailed Explanations &amp; Instructions</td>
</tr>
<tr>
<td>- Talk Alouds/Think Alouds</td>
</tr>
<tr>
<td>- Work Models</td>
</tr>
<tr>
<td><strong>4. Opportunities for Review/ Practice</strong></td>
</tr>
<tr>
<td>- Active Engagement</td>
</tr>
<tr>
<td>- Collaborative Assignments</td>
</tr>
<tr>
<td>- Checks for Understanding</td>
</tr>
<tr>
<td>- Spacing of Practice Throughout Lesson</td>
</tr>
<tr>
<td>- Guided Practice</td>
</tr>
<tr>
<td>- Support for Independent Practice</td>
</tr>
<tr>
<td>- Distributed Practice</td>
</tr>
</tbody>
</table>
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).
How To Implement Strong Core Instruction

Provide Opportunities for Review & Practice

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).
## How to: Implement Strong Core Instruction

<table>
<thead>
<tr>
<th>1. Access to Instruction</th>
<th>2. ‘Scaffolding’ Support (Cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Match</td>
<td>Group Responding</td>
</tr>
<tr>
<td>Content Review</td>
<td>High Rate of Student Success</td>
</tr>
<tr>
<td>Preview of Lesson Goal(s)</td>
<td>Fix-Up Strategies</td>
</tr>
<tr>
<td>Brisk Rate of Instruction</td>
<td>Timely Performance Feedback</td>
</tr>
<tr>
<td>Chunking of New Material</td>
<td>Regular Feedback</td>
</tr>
<tr>
<td>Fix-Up Strategies</td>
<td>Step-by-Step Checklists</td>
</tr>
<tr>
<td>Work Models</td>
<td>Opportunities for Review/ Practice</td>
</tr>
<tr>
<td>Active Engagement</td>
<td>Spacing of Practice Throughout Lesson</td>
</tr>
<tr>
<td>Collaborative Assignments</td>
<td>Guided Practice</td>
</tr>
<tr>
<td>Checks for Understanding</td>
<td>Support for Independent Practice</td>
</tr>
<tr>
<td></td>
<td>Distributed Practice</td>
</tr>
</tbody>
</table>

### Activity: Strong Direct Instruction

1. Review this list of **elements** of direct instruction.
2. Discuss how you might use this checklist in your own classroom or school.
**Pivot Points.** What are key classroom competencies that ANY student needs for school success?
The Struggling Student in a General-Education Setting: Pivot Points

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

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

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

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

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

Basic academic skills

Emotional control

Academic ‘survival skills’

Peer interactions

Work completion

Self-efficacy

Transitions

Self-understanding

Attentional focus

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

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

B. **Academic Survival Skills.** The student possesses the academic survival skills (e.g., homework skills, time management, organization) necessary to manage their learning.
Pivot Points: The Struggling Student in a General Education Setting

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

D. Transitions. The student flexibly adapts to changing academic routines and behavioral expectations across activities and settings (e.g., content-area classes; specials).
Pivot Points: The Struggling Student in a General Education Setting

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

F. **Emotional Control.** The student manages emotions across settings, responding appropriately to setbacks and frustrations.
Pivot Points: The Struggling Student in a General Education Setting

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

H. Self-Efficacy. The student possesses a positive view of their academic abilities, believing that increased effort paired with effective work practices will result in improved outcomes (‘growth mindset’).
Pivot Points: The Struggling Student in a General Education Setting

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

J. **Self-Advocacy.** The student advocates for their needs and negotiates effectively with adults.
Pivot Points: The Struggling Student in a General-Education Setting: ACTIVITY

A. Basic Academic Skills. The student has sufficient mastery of

DIRECTIONS. Review the 10 ‘pivot points’ discussed today.

1. Select up to 3 that you or your school find most challenging.

2. Number those selected in order from greatest (‘1’) to least (‘3’) importance.

3. Be prepared to report out.

J. Self-Advocacy. The student advocates for their needs and negotiates effectively with adults.
### Pivot Points: The Struggling Student in a General-Education Setting: ACTIVITY

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

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

2. INTERVENTIONS. The student receives research-based interventions to help them to succeed in core instruction.

3. ACCOMMODATIONS. The student has access to classroom accommodations as needed to reach grade-level potential.

4. PLAN. The student has a written intervention plan.

5. DATA. The student has assessment data collected to better understand the academic delay and/or to track progress.
Identifying the Academic Problem. What process for describing academic problems can increase teachers’ chances of finding interventions that work?
Response to Intervention

Worksheet p. 24

Activity: Write an Academic Problem-Identification Statement for Your Student

1. Choose a student you work with that has 1 or more significant academic challenges requiring a Tier 1/Classroom Intervention Plan. Answer these questions regarding your student:
   a. Academic Task. What specific academic task is the greatest academic challenge for this student?
      
   b. Current Performance. How does your student currently perform on this task?
      
   c. Expected Performance. What level of performance would you expect on this task from a typical/average student?
      
2. Write a 3-part Problem-Identification Statement. Use this organizer to rewrite your student’s academic problem in the form of a 3-part Problem ID statement. For examples, see handout:

<table>
<thead>
<tr>
<th>3-Part Academic Problem ID Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Conditions or Task Demands</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
1. Choose a student you work with that has 1 or more significant academic challenges requiring a Tier 1/Classroom Intervention Plan. Answer these questions regarding your student:

   - **Academic Task.** What specific academic task is the greatest academic challenge for this student?

   - **Current Performance.** How does your student currently perform on this task?

   - **Expected Performance.** What level of performance would you expect on this task from a typical/average student?
Academic Problem Identification: 3 Steps
pp. 6-7

1. Describe the problem.

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

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

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

The process of writing this statement can help to make the description of the academic behavior more specific and also prompts the teacher to think about an appropriate performance goal.
Academic Problem Identification: 3 Parts

1. **Conditions.** (‘**What is the academic task?**’). Describe the environmental conditions or task demands in place when the academic problem is observed.

2. **Problem Description.** (‘**What is the student’s current performance?**’). Describe the actual observable academic behavior with which the student has difficulty. If available, include specifics about student performance, such as rate of work, accuracy, or other relevant quantitative information.

3. **Typical or Expected Level of Performance.** (‘**What is the student’s expected performance?**’). Provide a typical or expected performance criterion for this skill or behavior. Typical or expected academic performance can be calculated using a variety of sources, such as benchmark norms, local (classroom) norms, or expert opinion.
### 3-Part Problem ID Statement: Examples

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Problem Description</th>
<th>Typical/Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>When reading aloud from a 1-minute 4th-grade passage</td>
<td>Benjamin reads an average of 45 words</td>
<td>while the fall norm (20th percentile) at Grade 4 is 68 words per minute.</td>
</tr>
</tbody>
</table>

**General Problem:** *Benjamin is a slow reader.*
### 3-Part Problem ID Statement: Examples

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Problem Description</th>
<th>Typical/Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>When completing sets of 5 short-answer questions based on assigned readings</td>
<td>Neda scores an average of 40% (2 of 5 correct)</td>
<td>while classmates score an average of 80%.</td>
</tr>
</tbody>
</table>

**General Problem:** *Neda does not retain important information from readings.*
3-Part Problem ID Statement: Examples

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Problem Description</th>
<th>Typical/Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>When shown flashcards with multiplication math facts 0 to 12 for 3 seconds</td>
<td>Annika can answer 57 of 169 correctly</td>
<td>while most peers in her class can name all facts correctly.</td>
</tr>
</tbody>
</table>

General Problem: Annika does not know all of her multiplication facts.
### 3-Part Problem ID Statement: Examples

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Problem Description</th>
<th>Typical/Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>When completing a beginning-level algebra word problem</td>
<td>Dennis is unable to translate that word problem into an equation with 1 variable</td>
<td>although this is a prerequisite skill for the course.</td>
</tr>
</tbody>
</table>

**General Problem:** *Dennis cannot convert an algebra word problem into an equation.*
### 3-Part Problem ID Statement: Examples

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Problem Description</th>
<th>Typical/Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given a 2-term addition or subtraction problem with proper fractions</td>
<td>Franklin (grade 7) cannot correctly solve</td>
<td>although this skill is a Grade 5 Common Core Learning Standard.</td>
</tr>
</tbody>
</table>

**General Problem:** *Franklin cannot add or subtract fractions.*
### 3-Part Problem ID Statement: Examples

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Problem Description</th>
<th>Typical/Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>On math homework</td>
<td>Neda attempts an average of 60% of assigned items</td>
<td>while classmates typically attempt 90% or more of items.</td>
</tr>
</tbody>
</table>

**General Problem:** Neda turns in incomplete math homework.
Activity: Write an Academic Problem-Identification Statement for Your Student

1. Choose a student you work with that has 1 or more significant academic challenges requiring a Tier 1/Classroom Intervention Plan. Answer these questions regarding your student:
   a. Academic Task. What specific academic task is the greatest academic challenge for this student?

   
   
   
   b. Current Performance. How does your student currently perform on this task?

   
   
   
   c. Expected Performance. What level of performance would you expect on this task from a typical/average student?

   
   

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

   
<table>
<thead>
<tr>
<th>3-Part Academic Problem ID Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Conditions or Task Demands</td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Academic Problems: Think of a Student

Problem ID: Write a 3-part Problem-Identification Statement. On your worksheet, write your student’s academic problem in the form of a 3-part Problem ID statement. For examples, see handout; pp. 6-7.

3-Part Academic Problem ID Statement

<table>
<thead>
<tr>
<th>Environmental Conditions or Task Demands</th>
<th>Problem Description</th>
<th>Typical or Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

www.interventioncentral.org
Academic Problem Identification: 3 Steps

Choose a hypothesis for what is the most likely cause of the problem.
2. Select a hypothesis to explain the academic skill or performance problem. The hypothesis states the assumed reason(s) or cause(s) for the student's academic problems. Once selected, the hypothesis acts as a compass needle, pointing toward interventions that most logically address the student academic problems. Listed below are common reasons for academic problems. Note that occasionally more than one hypothesis may apply to a particular student (e.g., a student may demonstrate a skill deficit as well as a pattern of escape/avoidance).

<table>
<thead>
<tr>
<th>Reason for Academic Problem</th>
<th>What It Looks Like</th>
<th>How to Respond</th>
<th>How to Measure: Sample Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Skill: The student is unable to do the academic work.</td>
<td>• All information sources (direct observation, work products, past records) indicate the student lacks the necessary skill(s) to do the work.</td>
<td>• Actively teach the target skill(s). • Give the student models of correct performance to consult as needed (e.g., correctly completed math problems on board). • Provide timely feedback about correct performance. Offer praise and encouragement for effort.</td>
<td>• Select any method for data collection that provides direct, observable evidence of the student's mastery of the academic skills being taught: e.g., teacher-made quizzes; rubrics; work products, etc.</td>
</tr>
</tbody>
</table>
| 2. Fluency: The student possesses the necessary academic skills but lacks fluency in completing the work. | • The student can complete the work but is inefficient, requiring substantially more time than classmates to do so. The student may also be committing large amounts of cognitive energy to the basic task, preventing them from focusing on higher-level problem-solving or comprehension. | • Provide opportunities for the student to practice the skill and receive timely performance feedback. • Reinforce the student for fluency as well as accuracy. | • Administer brief, timed measures to track growth in speed and efficiency.  
NOTE: Curriculum-based measures (CBM’s) (e.g., Oral Reading Fluency) are useful tools to track fluency in basic academic skills. |
| 3. Retention: The student appears to have mastered the necessary academic skill(s) in one session but does not retain the skill(s) until the next session. | • The student demonstrates success on an academic task (e.g., correctly recalling a set of math facts from memory) but on a following day cannot repeat this same task. | • Give the student multiple opportunities to drill on and ‘over-practice’ the skill. | • Track student mastery of academic items (e.g., basic math facts) using a Cumulative Mastery Record. |
Problem Identification: Example 1: Jackie

**Concern:** “Jackie doesn’t know important academic vocabulary.”

**Problem Type:** Skill Deficit
Skill

Reason for Academic Problem

- The student is unable to do the academic work.
<table>
<thead>
<tr>
<th>How to Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Actively teach the target skill(s).</td>
</tr>
<tr>
<td>• Give the student models of correct performance to consult as needed (e.g., correctly completed math problems on board).</td>
</tr>
<tr>
<td>• Provide timely feedback about correct performance.</td>
</tr>
<tr>
<td>• Offer praise and encouragement for effort.</td>
</tr>
</tbody>
</table>
Problem Identification: Example 2: Jay

Concern: “Jay is inconsistent with his math facts...one day he knows them, the next day he doesn’t.”

Problem Type: Retention Deficit
<table>
<thead>
<tr>
<th>Reason for Academic Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The student appears to have mastered the necessary academic skill(s) in one session but does not retain the skill(s) until the next session.</td>
</tr>
<tr>
<td>How to Respond</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>• Give the student multiple opportunities to drill on and ‘over-practice’ the skill.</td>
</tr>
</tbody>
</table>
**Problem Identification: Example 3: Trevor**

*Concern:* “Trevor doesn’t use ‘fix-up’ skills learned in reading group in my classroom.”

*Problem Type:*
Generalization Deficit
Generalization

Reason for Academic Problem

- The student possesses the necessary academic skill(s) but fails to recognize opportunities when they should use those skills.
### Generalization

#### How to Respond

- Identify situations/settings in which the student should use the missing skills (‘skills transfer’)

- Select a method (e.g., adult prompt; self-monitoring with a checklist) through which the student is alerted to apply those missing skills in the new setting.
Student Self-Monitoring Checklist

Goal While Reading: I READ the passage carefully for full understanding:

While reading, I stop after each paragraph to ask, "Did I understand what I just read?"

If I do understand the paragraph, I mark it with a plus sign (+) and continue reading.
If I do not understand the paragraph, I mark it with a minus (-) sign and:
- reread the paragraph;
- slow my reading;
- focus my full attention on what I am reading;
- underline any words that I do not know and try to figure them out from the reading (context).
Problem Identification: Example 4: Amber

**Concern:** “Amber does not complete independent writing assignments unless I continuously monitor and encourage her.”

**Problem Type:** Overprompting
Overprompting

Reason for Academic Problem

- The student completes the work—but requires high rates of adult prompting during the task.
### External Prompt Types (Online)

Table 1: Prompt Types (MacDuff et al., 2001)

<table>
<thead>
<tr>
<th>Prompt Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Prompt</td>
<td>The student is guided manually to complete the skill. Guiding the student’s hand to write letters on a worksheet is an example of a manual ('hand-over-hand') prompt. A partial manual prompt (e.g., the teacher guiding the student manually through only part of the task) is counted as a manual prompt.</td>
</tr>
<tr>
<td>Modeling Prompt</td>
<td>The student views a demonstration of the skill (e.g., demonstrated in person or via a video recording). Partial modeling (e.g., the teacher demonstrating a single step of a multi-step task) is counted as a modeling prompt.</td>
</tr>
<tr>
<td>Verbal Prompt</td>
<td>The student is prompted via verbal communication to demonstrate the skill. Verbal prompts can consist of a single word or several consecutive sentences. Encouragement and praise whose goal is to get the student to begin the task are considered verbal prompts.</td>
</tr>
<tr>
<td>Gestural Prompt</td>
<td>The student is prompted via a gesture (e.g., nodding, pointing, motioning, tapping on a worksheet) to complete the skill.</td>
</tr>
<tr>
<td>No Prompt</td>
<td>The student requires no prompting to complete the skill.</td>
</tr>
</tbody>
</table>
## Overprompting

### How to Respond

- A goal in reducing use of adult prompts is to shift from more-intensive to less-intensive prompt types.

- For example, if the teacher demonstrates the skill (modeling), that teacher can aim to instead use a less-intensive verbal prompt. Similarly, a verbal prompt may be replaced by the teacher pointing to a checklist outlining steps the student is to follow (gestural prompt).
Concern: “Owen constantly comes to me for help when doing deskwork.”

Problem Type: Seeking Help Too Often
Seeking Help Too Often

<table>
<thead>
<tr>
<th>Reason for Academic Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The student has the ability to complete the work—but seeks repeated assistance during the task.</td>
</tr>
</tbody>
</table>
Seeking Help Too Often

How to Respond

- Ensure that the student has supports to increase confidence during independent work (e.g., completed work models to review, fix-up strategies, etc.).
- Assign a fixed number of ‘help requests’ that the student can make (e.g., 3) during each work session. (Note: Consider also giving the student incentive NOT to use all help requests by allowing them to ‘cash in’ unused help requests for points, prizes, privileges, or rewards.)
Behavior Management Strategies: Skill-Building

- **Reinforcing lower rate of teacher help requests.** When a student too frequently seeks teacher help and reassurance, one strategy to fix the problem is to reinforce lower rates of help-seeking:

  1. **TRAIN THE STUDENT IN SELF-HELP STRATEGIES.** The teacher meets with the student to generate a checklist of appropriate self-help skills (e.g., consult a glossary or dictionary, ask a peer) that should be attempted before seeking teacher help.
Behavior Management Strategies: Skill-Building

• **Reinforcing lower rate of teacher help requests.** (Cont.)

2. **SELECT A MAXIMUM LIMIT FOR HELP REQUESTS.** The teacher decides on a reasonable upper limit of times that the student can request help during a given period. For example, a teacher may decide that, during a 20-minute independent seatwork period, the student should require no more than 3 opportunities to seek teacher help.
Behavior Management Strategies: Skill-Building

• Reinforcing lower rate of teacher help requests. (Cont.)

3. CREATE A REQUEST-MONITORING CARD. The teacher makes a daily monitoring index-card to be placed on the student's desk. The card contains a series of check-off boxes equivalent to the acceptable maximum of help requests—plus an 'extra' box. For example, if 3 is the maximum for allowable help requests during a period, the card contains 4 check-off boxes.
Sample Teacher-Request Monitoring Card

Help Card for: ______________________ Date: __________

- Help 1
- Help 2
- Help 3
- Bonus Box

If the bonus box is unchecked at the end of the period, the student will earn ___ points.
<table>
<thead>
<tr>
<th></th>
<th>Identification of Academic Problems in the Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Skill. The student is unable to do the academic work.</td>
</tr>
<tr>
<td>2.</td>
<td>Fluency. The student possesses the necessary academic skills but lacks fluency in completing the work.</td>
</tr>
<tr>
<td>3.</td>
<td>Retention. The student appears to have mastered the necessary academic skill(s) in one session but does not retain the skill(s) until the next session.</td>
</tr>
<tr>
<td>4.</td>
<td>Generalization. The student possesses the necessary academic skill(s) but fails to recognize opportunities when they should use those skills.</td>
</tr>
<tr>
<td>5.</td>
<td>‘Academic Survival’ Skills. The student’s lack of academic survival skills (e.g., homework regimen; organizational skills) interferes with their completing and submitting work.</td>
</tr>
<tr>
<td>6.</td>
<td>Overprompting. The student completes work—requires frequent prompting.</td>
</tr>
<tr>
<td>7.</td>
<td>Seeking Help Too Often. The student has the ability to complete the work—but seeks repeated assistance during the task.</td>
</tr>
<tr>
<td>8.</td>
<td>Lack of Confidence/Work Avoidance. The student has the foundation skills to undertake the academic work—but displays an attitude of ‘learned helplessness’ that undermines confidence and work performance.</td>
</tr>
</tbody>
</table>
3. Write a Hypothesis Statement. Based on your knowledge of this student, write a ‘hypothesis’ statement that pinpoints the likely root cause of the academic problem. See table below for a listing of possible hypotheses.

**Hypothesis Statement**

---

**Reason for Academic Problem**

1. Skill. The student is unable to do the academic work.
2. Fluency. The student possesses the necessary academic skills but lacks fluency in completing the work.
3. Retention. The student appears to have mastered the necessary academic skill(s) in one session but does not retain the skill(s) until the next session.
4. Generalization. The student possesses the necessary academic skill(s) but fails to recognize opportunities when they should use those skills.
5. ‘Academic Survival’ Skills. The student’s lack of academic survival skills (e.g., homework regimen; organizational skills) interferes with their completing and submitting work.
6. Overprompting. The student completes the work—but requires high rates of adult prompting during the task.
7. Seeking Help Too Often. The student seeks frequent adult help on the assignment even though all signs indicate that the student has the ability to do the work independently.
8. Lack of Confidence/Work Avoidance. The student has the foundational skills to undertake the academic work—but displays an attitude of ‘learned helplessness’ that undermines confidence and work performance.
3. Write a Hypothesis Statement. Based on your knowledge of this student, write a ‘hypothesis’ statement that pinpoints the likely ‘root cause’ of the academic problem. (See pp. 8-10 for complete descriptions of each hypothesis.)
Literacy Interventions. What are examples of classroom reading/writing interventions?
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.

<table>
<thead>
<tr>
<th>Classroom Reading/Writing Interventions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocabulary</strong></td>
<td><strong>Writing</strong></td>
</tr>
<tr>
<td>• Reading Racetrack</td>
<td>• Sentence Combining</td>
</tr>
<tr>
<td><strong>Fluency</strong></td>
<td></td>
</tr>
<tr>
<td>• Group-Based Repeated Reading</td>
<td></td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td></td>
</tr>
<tr>
<td>• Click or Clunk</td>
<td></td>
</tr>
<tr>
<td>• Repeated Reading with Oral/Written</td>
<td></td>
</tr>
<tr>
<td>Retell</td>
<td></td>
</tr>
<tr>
<td>• Read-Ask-Paraphrase</td>
<td></td>
</tr>
<tr>
<td>• Linking Pronouns to Referents</td>
<td></td>
</tr>
<tr>
<td>• Ask-Read-Tell</td>
<td></td>
</tr>
<tr>
<td>• Phrase-Cued Text Lesson</td>
<td></td>
</tr>
</tbody>
</table>
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.

**Response to Intervention**

---

**Reading Racetrack Score Sheet**

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

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.** The tutor selects a student passage of 150 words or longer at their instructional level.

**Procedure:**

1. *Passage Preview.* The tutor reads the passage aloud while students follow silently. The tutor stops at random points and calls on a student to read the word.

2. *Repeated Reading.* The tutor directs students to read the passage at a rate of 1 sentence per student until passage is read. The tutor does 2 additional readings.

3. *Phrase-Drill Error Correction.* Students practice correct word embedded within sentence for each error.

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.

‘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 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 (1980), Babkin (1994)
Repeated Reading with Oral/Written Retell

Teachers can combine repeated reading and oral or written retell as a package to boost student fluency and retention of text details (Schisler, Joseph, Konrad, & Alber-Morgan, 2010).

Materials. To use repeated reading with oral or written retell, the tutor will need these materials:

- Tutor and student copies of an informational passage of at least 200 words.
- Stopwatch
- Lined paper (for written-retell procedure)

Repeated Reading with Oral/Written Retell

Procedure:

1. *The student reads the passage aloud with error correction.* The tutor follows along silently. For misreads or hesitations of 3 seconds or longer, the tutor uses the phrase-drill error correction technique. The tutor directs the student to read the passage once more.

2. *The student engages in oral or written retell.* When the student has read the passage twice, the tutor directs the student to use oral or written retell:
   *Written retell.* The student is given a lined sheet and given 3 mins to write down what they can remember from the passage.

Informational Passage: Written Retell

Student: ___________________________ Date: __________ Passage Title: ________________________________

Directions: Write everything that you remember about the passage you have just read. Keep writing until you are directed to stop.

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

Reading Comprehension: Self-Management Strategies

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

Read-Ask-Paraphrase: STEPS:

1. **Read**: Read the paragraph closely.
2. **Ask**: What is the main idea and 2 supporting details?
3. **Paraphrase**: Write key idea and details in your own words.

<table>
<thead>
<tr>
<th>Paragraph 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
Delivering ‘Classroom’ Interventions: RAP Example

Tier 1: Classroom: Whole Class. Because many students need the intervention, the teacher trains the entire class to use RAP and assigns it as homework for challenging readings.

Tier 1: Classroom: Small Group. The teacher conducts a group training for several students who need the RAP strategy.

Tier 1: Classroom: 1:1. The teacher trains a single student to use RAP.

Tier 1/2: Cross-Age Peer Tutoring. Older students are assigned as tutors/mentors to younger learners. One item in their tutoring toolkit is RAP. Teaching staff supervise these tutors.

Tier 2: Small Group. The AIS provider creates a 6-week mini-course in applied reading comprehension strategies, including RAP. Students are recruited based on school-wide screening data and teacher nominations.

Tier 2: Adult Mentor. A teaching assistant ‘checks in’ with select Tier 2 students at the start and end of the school day about their school work. The TA trains students to use RAP, monitors their use of it, and informs classroom teachers as well so they can support its use.

Read-Ask-Paraphrase
Reading Comprehension ‘Fix-Up’ Skills: A Toolkit

- **Linking Pronouns to Referents** (Hedin & Conderman, 2010). Some readers lose the connection between pronouns and the nouns that they refer to (known as ‘referents’)—especially when reading challenging text. The student is encouraged to circle pronouns in the reading, to explicitly identify each pronoun’s referent, and (optionally) to write next to the pronoun the name of its referent. For example, the student may add the referent to a pronoun in this sentence from a biology text: “The Cambrian Period is the first geological age that has large numbers of multi-celled organisms associated with it.”
Step 2: Goal While Reading: I READ the passage carefully for full understanding:

While reading, I stop after each paragraph to ask, "Did I understand what I just read?"

If I do understand the paragraph, I mark it with a plus sign (+) and continue reading.
If I do not understand the paragraph, I mark it with a minus (-) sign and:
- reread the paragraph;
- slow my reading;
- focus my full attention on what I am reading;
- underline any words that I do not know and try to figure them out from the reading (context).
Phrase-Cued Text Lessons

- Phrase-cued texts are a means to train students to recognize the natural pauses that occur between phrases in their reading. Because phrases are units that often encapsulate key ideas, the student’s ability to identify them can enhance comprehension of the text (Rasinski, 1990, 1994).

Phrase-Cued Text Lessons

PREPARATION: Here are guidelines for preparing phrase-cued passages:

1. **Select a Passage.** Select a short (100-250 word) passage that is within the student’s instructional or independent level.

2. **Mark Sentence Boundaries.** Mark the sentence boundaries of the passage with double slashes (//).

3. **Mark Within-Sentence Phrase-Breaks.** Read through the passage to locate ‘phrase breaks’ — naturally occurring pause points that are found within sentences. Mark each of these phrase breaks with a single slash mark (/).

Example: Passage With Phrase-Cued Text Annotation

Phrase-Cued Text

For animals that drift through the sea without the benefit of eyesight, / jellyfish have managed to survive remarkably well. // In fact, / in areas where overfishing and habitat destruction have reduced fish populations, / jellyfish are now becoming the dominant predators. //

It turns out that jellyfish, / despite their sluggish looks, / are just as effective at hunting and catching meals as their competitors with fins. // They may not move as quickly, / but in a study published in the journal Science, / researchers found that many jellyfish use their body size to increase their hunting success. // With their large, watery bodies and long tentacles, / they conserve energy by letting currents guide them into their
INTERVENTION STEPS (Cont.):

Follow the Phrase-Cued Text Reading Sequence: The tutor prepares a new phrase-cued passage for each session and follows this sequence:

a) The tutor reads the phrase-cued passage aloud once as a model, while the student follows along silently.

b) The student reads the phrase-cued passage aloud 2-3 times. The tutor provides ongoing feedback about the student reading, noting the student’s observance of phrase breaks.

c) The session concludes with the student reading aloud a copy of the passage without phrase-cue marks. The tutor provides feedback about the student’s success in recognizing the natural phrase breaks in the student’s final read-aloud.

Step 1 of 3

Fill out the title, author, and copy & paste a passage of text into the form below:

Title
Jellyfish Are Effective Pre

Author
NY Times

Passage
For animals that drift through the sea without the benefit of eyesight, jellyfish have managed to survive remarkably well. In fact, in areas where overfishing and habitat destruction have reduced fish populations, jellyfish are now becoming the dominant predators.

It turns out that jellyfish, despite their sluggish looks, are just as effective at hunting and catching meals as their competitors with fins. They may not move as quickly, but in a study published in the journal Science, researchers found that many jellyfish use their body size to increase their hunting success. With their large, watery bodies and long tentacles, they conserve energy by letting currents guide them into their prey, said José Luis Acuña, an author of the paper and a biologist at the University of Oviedo in Spain.

“To our surprise, jellyfish were as good predators as visually predating fish in spite of being slow and blind, because they play an entirely different hydromechanical trick,” he said in an e-mail.

Word Count: 163 (Min: 20 Max: 500)

 Checkbox: Remove all line breaks to create a single-paragraph passage
Sentence Combining

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

- ‘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

Intervention Sources: WWC Practice Guides

• The What Works Clearinghouse is a federally sponsored site that includes a series of ‘practice guides’: summaries of current best practices in classroom instruction. All guides are written for teachers and are free for download.

IES › WWC What Works Clearinghouse

Select topics to Find What Works based on the evidence

- Literacy
- Mathematics
- Science
- Behavior
- Children and Youth with Disabilities
- English Learners
- Teacher Excellence
- Charter Schools
- Early Childhood (Pre-K)
- Kindergarten to 12th Grade
- Path to Graduation
- Postsecondary
Intervention Sources: Florida Center for Reading Research

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

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

Welcome to the EBI Network!

To support the use of evidence based interventions (EBI) in schools, the Evidence Based Intervention Network (EBIN) was developed to provide guidance in the selection and implementation of EBI in the classroom setting. The EBIN has an extensive resource base including evidence based intervention briefs, video modeling of EBIs, information on selecting and using EBI. Each of these resources has been developed in collaboration with faculty and students from a variety of universities. We hope you find the information useful to help children who are struggling.
<table>
<thead>
<tr>
<th>Classroom Reading/Writing Interventions</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocabulary</strong></td>
<td><strong>Writing</strong></td>
</tr>
<tr>
<td>• Reading Racetrack</td>
<td>• Sentence Combining</td>
</tr>
<tr>
<td><strong>Fluency</strong></td>
<td><strong>Lab Work: Select Interventions to Pilot.</strong></td>
</tr>
<tr>
<td>• Group-Based Repeated Reading</td>
<td>Review this list of sample classroom reading/writing intervention ideas.</td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td>Select 1-2 ideas that you would MOST like to try in your classroom.</td>
</tr>
<tr>
<td>• Click or Clunk</td>
<td></td>
</tr>
<tr>
<td>• Repeated Reading with Oral/Written Retell</td>
<td></td>
</tr>
<tr>
<td>• Read-Ask-Paraphrase</td>
<td></td>
</tr>
<tr>
<td>• Linking Pronouns to Referents</td>
<td></td>
</tr>
<tr>
<td>• Ask-Read-Tell</td>
<td></td>
</tr>
<tr>
<td>• Phrase-Cued Text Lesson</td>
<td></td>
</tr>
</tbody>
</table>
How to individualize instruction. What are ideas to differentiate/scaffold instruction for academic success?
Differentiation vs. Scaffolding: Two Kinds of Support

Differentiation & scaffolding share similarities. Both require individualization and are used to increase student engagement and academic success. However, they also differ...

**Differentiation.** The academic task itself is altered to match student abilities.

- Easier assigned readings
- Shorter independent work periods
- Different assignment format (e.g., multiple-choice vs. short-answer)

**Scaffolding.** The student is given supports that allow them to meet the demands of the original academic task.

- Pre-teaching vocabulary
- Chunking of tasks into smaller increments
- Use of organizers to highlight key information from text

Differentiation & Scaffolding: Enabling Strategies

Assisted Reading Level: Gr 8 Assignment
- Providing a reading guide
- Providing easier text
- Pre-teaching vocabulary

Independent Reading Level: Gr 4 Assignment

Gr 8 RDNG
Gr 7 RDNG
Gr 6 RDNG
Gr 5 RDNG
Gr 4 RDNG
Gr 3 RDNG

Interventions, Instructional Adjustments & Modifications: Sorting Them Out (Handout; p. 11)

- **Academic Intervention.** An academic intervention is a strategy used to teach a new skill, build fluency in a skill, or encourage application of an existing skill to new situations or settings. *Example: Read-Ask-Paraphrase.*

- **Instructional Adjustment/ Accommodation.** An instructional adjustment (also known as an 'accommodation') helps the student to fully access and participate in the general-education curriculum without changing the instructional content or reducing the student’s rate of learning. *Examples: Chunking larger tasks into smaller sub-tasks; keyboarding a writing assignment in lieu of handwriting.*

- **Modification.** A modification changes the expectations of what a student is expected to know or do—typically by lowering the academic standards against which the student is to be evaluated. *Example: Open book test for one.*
Deciding How to Accommodate.
What are examples of classroom ‘instructional adjustments’ (accommodations) that can benefit struggling learners? pp. 13-15
Classroom Accommodations for Academics: A Teacher Toolkit
pp. 13-15

An accommodation ("instructional adjustment") is intended to help the student to fully access and participate in the general-education curriculum without changing the instructional content and without reducing the student's rate of learning (Skinner, Pappas & Davis, 2005). An accommodation is intended to remove barriers to learning while still expecting that students will master the same instructional content as their typical peers.

Here is a list of possible accommodations that teachers can consider using for specific students or with the entire class.

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>Attention/Impulsivity</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALLOW PHYSICAL MOVEMENT. To accommodate the fidgety student, negotiate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>appropriate outlets for movement (e.g., allowing the student to pace at the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>back of the classroom during a lesson).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHUNK CLASSWORK SESSIONS AND INCLUDE BREAKS. Break up lectures or student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>work sessions into smaller segments and include brief breaks to sustain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>student attention.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CREATE LOW-DISTRACTION WORK AREA. Set up a study carrel in the corner of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>room or other low-distractions work area. Direct or allow distractible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>students to use this area when needed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USE PREFERENTIAL SEATING. Seat the student in a classroom location that</td>
<td></td>
<td></td>
</tr>
<tr>
<td>minimizes distractions and maximizes the ability to focus on the teacher’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>instruction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USE SILENT CUES. Meet with the student and agree on one or more silent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>teacher cues to redirect or focus the student (e.g., placing a paperclip on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the student’s desk) during class instruction. Use the cue as needed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USE VISUAL BLOCKERS. Encourage the student to reduce distractions on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>assignments by using a blank sheet of paper or similar aid to cover sections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the page that the student is not currently working on.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REPEAT/REPHRASE COMMENTS. Repeat or rephrase student questions or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>comments to the class or group before responding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIRECTIONS: ASSIGN A BUDDY. Assign a study buddy who is willing and able to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>repeat and explain directions to the student.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIRECTIONS: SIMPLIFY. Simplify written directions on assignments to promote</td>
<td></td>
<td></td>
</tr>
<tr>
<td>student understanding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROVIDE SCHEDULES/AGENDAS. Provide the student with an academic agenda or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule for the class period or school day, to include: instructional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>activities, independent assignments, other tasks to be covered during the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>period, as well as their approximate duration. Preview with students to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare them for upcoming activities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• **Attention/Impulsivity:** USE ‘VISUAL BLOCKERS’. Encourage the student to reduce distractions on assignments by using a blank sheet of paper or similar aid to cover sections of the page that the student is not currently working on.
• **Communication**: DIRECTIONS: SIMPLIFY. Simplify written directions on assignments to promote student understanding.
Independent Work: STRUCTURE ASSIGNMENTS FOR INITIAL SUCCESS. Promote student motivation on worksheets and independent assignments by presenting easier items first and more challenging items later.
Lab Work: Find an Accommodation for Your Classroom

In your groups:

1. Scan the sample accommodation ideas on pp. 13-15 of your handout.

2. Select:
   - one idea that you currently use in your classroom.
   - one idea that you would like to start using.

3. Share your selections with your group.
Self-Management.

What interventions can help students to better manage their own learning?
Self-Regulation: Motivation…With a Plan

“Self-regulation of learning involves learners setting goals, selecting appropriate learning strategies, maintaining motivation, engaging in self-monitoring, and evaluating their own academic progress.” p. 451

How To...Promote Academic Self-Management: The Learning Contract
Learning Contracts: Put Student Promises in Writing...

• **Description.** A learning contract is a voluntary, student-completed document that outlines actions the learner promises to take in a course to achieve academic success.

• This contract is signed by the student, the instructor, and (optionally) the parent.


Learning Contract:  
Example

Name: Russell B.  
Teacher: Mr. Rappaport  
Class/Course: Science 10  
Date: Feb 4, 2018

Russell B: Success Contract: Science 10
I am taking part in this learning contract to improve my grades and pass the course.

Student Responsibilities
I have chosen to complete the following actions:

1. I will arrive to class on time.
2. I will bring my work materials to class, including paper, notebook, textbook, and current assignments.
3. I will keep my desk organized during independent work.
4. I will submit any current homework at the start of class.

Teacher Responsibilities
My teacher will help me to achieve success in this course through these actions/supports:

1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3. 
4. 

Length of Contract
The terms of this contract will continue until:
April 8, 2018: At that point, teacher and student will review progress and decide whether to continue, amend, or end this learning contract.

Sign-Offs
Mr. Rappaport  
Russell B.

Mr. Rappaport  
Teacher  
Russell B.  
Student  
[Parent Name]  
Parent
Learning Contracts: Put Student Pledges in Writing…

**Benefits.** Learning contracts:

- provide academic structure and support,
- motivate struggling learners by having them pledge publicly to engage in specific, positive study and learning behaviors, and
- serve as a vehicle to bring teachers and students to agreement on what course goals are important and how to achieve them.

**Sources:**

Learning Contract:
Example

Russell B: Success Contract: Science 10
I am taking part in this learning contract to improve my grades and pass the course.

Student Responsibilities
I have chosen to complete the following actions:

1. I will arrive to class on time.
2. I will bring my work materials to class, including paper, notebook, textbook, and current assignments.
3. I will keep my desk organized during independent work.
4. I will submit any current homework at the start of class.

Teacher Responsibilities
My teacher will help me to achieve success in this course through these actions/supports:
1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3. 

Length of Contract
The terms of this contract will continue until:
April 8, 2018: At that point, teacher and student will review progress and decide whether to continue, amend, or end this learning contract.

Sign-Offs
Mr. Rappaport
Russell B.

Mr. Rappaport
Teacher
Russell B.
Student
[Parent Name]
Parent
I am taking part in this learning contract to improve my grades and pass the course.

Statement of Purpose. The contract opens with a statement presenting a rationale for why the contract is being implemented.
Response to Intervention

Learning Contract: Example

Russell B. Success Contract: Science 10

I am taking part in this learning contract to improve my grades and pass the course.

Student Responsibilities

I have chosen to complete the following actions:

1. I will arrive to class on time.
2. I will bring my work materials to class, including paper, notebook, textbook, and current assignments.
3. I will keep my desk organized during independent work.
4. I will submit any current homework at the start of class.

Teacher Responsibilities

My teacher will help me to achieve success in this course through these actions/supports:

1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3. 
4. 

Length of Contract

The terms of this contract will continue until:

April 8, 2018: At that point, teacher and student will review progress and decide whether to continue, amend, or end this learning contract.

Sign-Offs

Mr. Rappaport  Russell B.
**Response to Intervention**

**Student Responsibilities**

I have chosen to complete the following actions:

1. I will arrive to class on time.

2. I will bring my work materials to class, including paper, notes, and assignments.

3. I will keep my desk organized during independent work.

4. I will submit any current homework at the start of class.

---

**Student Actions.** The contract lists any actions that the student is pledging to complete to ensure success in the course.
Learning Contract: Example

Russell B: Success Contract: Science 10
I am taking part in this learning contract to improve my grades and pass the course.

Student Responsibilities
I have chosen to complete the following actions:

1. I will arrive to class on time.
2. I will bring my work materials to class, including paper, notebook, textbook, and current assignments.
3. I will keep my desk organized during independent work.
4. I will submit any current homework at the start of class.

Teacher Responsibilities
My teacher will help me to achieve success in this course through these actions/supports:

1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3. 
4. 

Length of Contract
The terms of this contract will continue until:
April 8, 2018: At that point, teacher and student will review progress and decide whether to continue, amend, or end this learning contract.

Sign-Offs

Mr. Rappaport
Russell B.

Mr. Rappaport
Teacher
Russell B.
Student
[Parent Name]
Parent
**Teacher Actions.** Listing teacher responsibilities on the contract emphasizes that success in the course is a shared endeavor and can prod the student to take advantage of instructor supports that might otherwise be overlooked.

Teacher Responsibilities

My teacher will help me to achieve success in this course through these actions/supports:

1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3.
4.
Learning Contract: Example

Name: Russell B.  Teacher: Mr. Rappaport  Class/Course: Science 10  Date: Feb 4, 2018

Russell B: Success Contract: Science 10
I am taking part in this learning contract to improve my grades and pass the course.

Student Responsibilities
I have chosen to complete the following actions:

1. I will arrive to class on time.
2. I will bring my work materials to class, including paper, notebook, textbook, and current assignments.
3. I will keep my desk organized during independent work.
4. I will submit any current homework at the start of class.

Teacher Responsibilities
My teacher will help me to achieve success in this course through these actions/supports:
1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3. 
4. 

Length of Contract
The terms of this contract will continue until:
April 8, 2018: At that point, teacher and student will review progress and decide whether to continue, amend, or end this learning contract.

Sign-Offs
Mr. Rappaport  Russell B.
Teacher  Student
**Sign-Off.** Both student and teacher (and, optionally, the parent) sign the learning contract. The student signature in particular indicates a voluntary acceptance of the learning contract and a public pledge to follow through on its terms.
Learning Contract:
Example

**Russell B: Success Contract: Science 10**

I am taking part in this learning contract to improve my grades and pass the course.

**Student Responsibilities**

I have chosen to complete the following actions:

1. I will arrive to class on time.
2. I will bring my work materials to class, including paper, notebook, textbook, and current assignments.
3. I will keep my desk organized during independent work.
4. I will submit any current homework at the start of class.

**Teacher Responsibilities**

My teacher will help me to achieve success in this course through these actions/supports:

1. Weekly reminders about any missing homework.
2. Extra-help period available for challenging assignments.
3. 
4. 

**Length of Contract**

The terms of this contract will continue until:

April 8, 2018: At that point, teacher and student will review progress and decide whether to continue, amend, or end this learning contract.

**Sign-Offs**

Mr. Rappaport          Russell B.
How To...Promote Academic Self-Management: Academic Survival Skills Checklists
The Problem That This Tool Addresses:

Academic Survival Skills Checklist

Students who would achieve success on the ambitious Common Core State Standards must first cultivate a set of general 'academic survival skills' that they can apply to any coursework (DiPerna, 2006).

Examples of academic survival skills include the ability to study effectively, be organized, and manage time well.

When academic survival skills are described in global terms, though, it can be difficult to define them. For example, two teachers may have different understandings about what the term 'study skills' means.

Academic Survival Skills Checklist: What It Is…

- The teacher selects a global skill (e.g., homework completion; independent seatwork). The teacher then breaks the global skill down into a checklist of component sub-skills. An observer (e.g., teacher, another adult, or even the student) can then use the checklist to note whether a student successfully displays each of the sub-skills on a given day.
# Academic Survival Skills Checklist

<table>
<thead>
<tr>
<th>Academic Survival Skills Checklist: Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. WRITE DOWN HOMEWORK ASSIGNMENTS CORRECTLY.</strong> Make sure that you have copied down your homework assignment(s) correctly and completely. If necessary, approach the instructor before leaving the classroom to seek clarification about the homework assignment.</td>
</tr>
<tr>
<td><strong>2. ASSEMBLE ALL NECESSARY HOMEWORK MATERIALS.</strong> Make a list of those school work materials that you will need for that night's homework assignments and ensure that you have them before going home. School materials may include the course text, copies of additional assigned readings, your class notes, and partially completed assignments that are to be finished as homework. Additionally, monitor your work supplies at home (e.g., graph paper, pens, printer cartridges) and replenish them as needed.</td>
</tr>
<tr>
<td><strong>3. USE AVAILABLE SCHOOL TIME TO GET A START ON HOMEWORK.</strong> Take advantage of open time in school (e.g., time given in class, study halls, etc) to get a start on your homework. Getting a head start on homework in school can reduce the amount of time needed to complete that work later in the day. Also, if you start homework in school and run into problems, you have a greater chance of being able to seek out a teacher or fellow student to resolve those problems proactively and thus successfully complete that assignment.</td>
</tr>
</tbody>
</table>

4. Behavioral Checklists: Example 3:

**Academic Survival Skills Checklist**

<table>
<thead>
<tr>
<th>Academic Survival Skills Checklist: Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. CREATE AN OPTIMAL HOMEWORK SPACE. Create an organized space at home for getting homework done. The space can be temporary (e.g., kitchen table) or permanent (e.g., a desk in your bedroom). It should be quiet, well-lit, and include a table or desk large enough to lay out your work materials and a comfortable chair.</td>
</tr>
<tr>
<td>5. SCHEDULE A REGULAR HOMEWORK TIME. Homework is easier to complete if you set aside sufficient time in your schedule to do it. If possible, your daily routine should include a standing time when any homework is to be done. In deciding when to schedule a homework period, consider such factors as when your energy level is highest, when surrounding distractions are less likely to occur, and when shared resources such as a computer or printer may be available for your use.</td>
</tr>
<tr>
<td>6. DEVELOP A DAILY HOMEWORK PLAN. Before beginning your homework each day, take a few minutes to review all of your homework assignments and to develop a work plan. Your plan should include a listing of each homework task and an estimate of how long it will take to complete that task. It is a good rule of thumb to select the most difficult homework task to complete first, when your energy and concentration levels are likely to be at their peak. At the conclusion of your homework session, review the plan, check off all completed tasks, and reflect on whether your time estimates were adequate for the various tasks.</td>
</tr>
</tbody>
</table>

Academic Survival Skills Checklists: 5 Uses

1. Create consistent expectations among teachers.
2. Allow for proactive training of students.
3. Encourage students to self-evaluate and self-manage.
4. Monitor progress in acquiring these ‘survival skills’.
5. Can guide parent conferences.
Academic Survival Skills Checklist Maker
http://www.interventioncentral.org/tools/academic-survival-skills-checklist-maker

The Academic Survival Skills Checklist Maker provides a starter set of strategies to address:

• homework
• note-taking
• organization
• study skills
• time management.

Teachers can use the application to create and print customized checklists and can also save their checklists online.
Activity: Tools for Self-Management

In your groups:

- Review the academic self-management tools presented in this workshop.

- Discuss how you might use any of these tools in your own practice to motivate students by giving them the skills to break down and complete complex tasks.
Response to Intervention

Writing Down Tier 1/Classroom Interventions. What is a convenient form that allows teachers to quickly document classroom intervention plans while following an RTI problem-solving process? pp. 16-20
Teacher Problem-Solving: Just a Part of the Job…

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

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

In this era of accountability, classroom intervention efforts are not acknowledged unless they are documented: “Teachers are already doing 90% of the work. But they are often getting zero credit.”

RTI/MTSS provides a structure and toolkit for teachers to record and share classroom intervention plans. With little or no extra time, instructors can get full credit for their problem-solving work.
The Individualization Continuum: When Should Classroom Intervention Efforts Be Documented?

Tier 1: Core Instruction
The Individualization Continuum: When Should Classroom Intervention Efforts Be Documented?

Tier 1: Core Instruction

Rayshawn. Typical student making expected progress with core instruction alone. No intervention plan needed.
The Individualization Continuum: When Should Classroom Intervention Efforts Be Documented?

Tier 1: Core Instruction

Sara. Requires occasional reteaching, reinforcement of core instructional content. No intervention plan needed.
The Individualization Continuum: When Should Classroom Intervention Efforts Be Documented?

Individualization: Reteaching, Differentiation, Scaffolding

Tier 1: Core Instruction

**Tomás.** Needs sustained teacher attention across several instructional weeks. Benefits from intervention plan (e.g., Read-Ask-Paraphrase) to fully access core instruction. Intervention plan recommended.
When helping teachers to plan Tier 1/classroom interventions, what is the right balance between too little and too much support?

- **Teacher Alone**
  - Too Little Support

- **Teacher & Consultant**
  - "Sweet Spot": Appropriate Support

- **Teacher & Grade-Level/Instructional Team**
  - Too Much Support

- **Teacher & RTI Problem-Solving Team**
RTI/MTSS Classroom Support Plan: ‘Message in a Bottle’:

Who might benefit?

**Colleagues.** Your intervention efforts can be read by your fellow teachers and future educators.

**Parents & Student.** You can make the creation of the Classroom Support Plan the focus of student and parent conferences.

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

**RTI/MTSS Problem-Solving Team.** Your classroom intervention plan helps the team to make better recommendations.
How To: Create a Written Record of Classroom Interventions (pp. 16-20)

### Classroom Intervention Planning Sheet

**Case Information**
- **Student:** Josh H.
- **Interventionist:** Mr. Smith
- **Date Intervention is to Start:** 27 Oct 2014
- **Date Intervention is to End:** 8 weeks
- **Description of the Student Problem:** Josh has difficulty creating a reading plan, monitoring understanding while reading, applying fix-up skills, and processing information.

**Problem Description**
- **Intervention:**
  - **What to Write:** Record the important case information, including student and dates for the intervention plan, and the total number of instructions.
  - **Materials:**
    - Ask-Read-Tell Cognitive Link:
    -杰米怀顿互动形式.pdf
  - **Training:**
    - **How to Write:** A brief intervention, you can just write on this sheet.

**Listing of Intervention Elements**
- **Materials:**
  - Not down materials (e.g., flashcards) or resources (e.g., Internet-connected computer) needed to complete this intervention.
- **Training:**
  - **How to Write:** Note what training—any—needs to be done with the student. TIP: if you have a script for this sheet.

**Plan to Monitor Progress**
- **Type of Data Used to Monitor:**
  - ART sheets; quiz grades
- **Baseline Outcome Goal:**
  - None for ART sheets
  - Quiz grades: 65%
- **How often data will be collected:**
  - ART sheets/reading: assigned; quizzes weekly

**Progress-Monitoring**
- **Type of Data Used to Monitor:**
  - Art sheets; quiz grades
- **Baseline Outcome Goal:**
  - None for ART sheets
  - Quiz grades: 50%
- **How often data will be collected:**
  - Daily, every other day weekly.
When Would You Document?

List situations at your school when you may want to document (put into writing) a classroom intervention plan.

How well would the sample form on pp. 17-18 suit your needs?
Using Motivational Tools for Communication

pp. 21-23
Using Motivational Teacher Tools

Teacher communication strategies are a powerful means to motivate students. In this segment, we look at four methods for increasing student motivation and academic engagement:

• change talk
• praise
• growth mindset statements
• wise feedback
Change Talk. Draw attention to change-oriented student talk.
Change Talk. Highlight Change-Oriented Talk

- **What It Is.** Change talk (Miller & Rollnick, 2004) is any statement (or partial statement) that expresses hope, interest in making positive changes, a willingness to try new strategies, or other positive attitudes.

Elements of student change talk are often intermixed with expressions of uncertainty, frustration, and doubt.

Change Talk. Focus on Positive Change

When people talk about taking on the challenge of changing their behavior to achieve desired outcomes, their comments can veer between:

• ‘Change Talk’: Exploring the desired change, and
• ‘Obstacles Talk’. Highlighting obstacles to change.

Change Talk. Focus on Positive Change

An effective way to encourage others to make beneficial changes in their lives is to listen... and to single out and respond to the positive ‘change talk’ elements in their responses.

Change Talk | Obstacles Talk

I want to get more exercise... but I am so busy with work!

An effective way to encourage others to make beneficial changes in their lives is to listen and respond to the positive ‘change talk’ elements in their responses.

**Change Talk**

*I want to get more exercise...*

**Obstacles Talk**

*but I am so busy with work!*

---

An effective way to encourage others to make beneficial changes in their lives is to listen… and to single out and respond to the positive ‘change talk’ elements in their responses.

**Change Talk**

I want to get more exercise...

**Obstacles Talk**

but I am so busy with work!

More Effective Response: “Yes, you might have more energy if you increased your exercise.”

Change Talk. The Power of Differential Attention

By listening carefully, the educator can draw attention to elements of change talk shared by the student, reinforce them, have the student elaborate on them, and thus increase that learner’s optimism and confidence (Miller & Rollnick, 2004).

“I want to do better in this course…”

“Sure, it would be great if I could bring my grades up…”

“.. but the work is so hard!”

“.. but I am not smart in math.”
Conferencing with Students: Two Suggestions

When you conference with students, the motivational interview literature (Miller & Rollnick, 2004) suggests 2 important strategies:

1. **AVOID** an authoritarian tone. The goal is to motivate the student to take responsibility for positive behavior change—not to win a debate.

2. **DO** use your comments to draw attention to instances of student 'change talk' -- statements expressing interest in making positive changes.

Comments to Encourage Change Talk: Examples

STUDENT: Sure, it would be great if I could bring my grades up, but I’m not smart in math.

• Tell me more about improving your grades. Why is that important to you?

• So there are challenges, sure, but it sounds like getting your grades up is something you would like to focus on.

• If improving your grades is a goal you are willing to commit to, we can talk about strategies that might help.

• I agree that getting higher grades is important. Are you ready to develop a plan that can help you to achieve it?

Behavior-Specific Praise. Shape student behavior with this positive coaching tool.
Behavior-Specific Praise. Shape Behavior with This Positive Coaching Tool

• What It Is. Praise is positive teacher attention “paired with a specific informational statement” (Landrum & Sweigart, 2014).

Behavior-Specific Praise

Effective teacher praise has two elements: (1) a behavior-specific description of noteworthy student performance, and (2) a signal of teacher approval (Hawkins & Hellin, 2011). Because this 'process praise' ties performance directly to effort, it reinforces a growth mindset in students who receive it.

**EXAMPLE:**

"Your writing is improving a lot. The extra time you put in and your use of an outline has really paid off."
**Growth Mindset.** Structure your statements to encourage optimism and motivation.
Growth Mindset. Encourage an Optimistic Frame of Mind

- **What It Is.** The habitual ways that people have of thinking about their abilities can be thought of as ‘mindsets’. Mindsets fall into two categories: **Fixed vs. growth**.

As we will see, a **fixed mindset** encourages ‘learned helplessness’, while a **growth mindset** motivates the student to apply increased effort to academic tasks.

### Beliefs About Mindsets: Fixed vs. Growth

<table>
<thead>
<tr>
<th>Fixed Mindset</th>
<th>Growth Mindset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence (general ability) is fixed. <strong>Effort</strong> plays a <strong>minor role</strong> in determining one's level of accomplishment.</td>
<td>Intelligence and other attributes are ‘<strong>malleable’</strong>—they can increase with effort.</td>
</tr>
<tr>
<td>Thus, <strong>setbacks</strong> are viewed as a <strong>lack of ability</strong>. (Blackwell, et al., 2015).</td>
<td>This perspective views <strong>struggle</strong> as a <strong>positive</strong>—&quot;an opportunity for growth, not a sign that a student is incapable of learning.&quot; (Paunesku, et al., 2015).</td>
</tr>
</tbody>
</table>
The ‘Malleability’ of Intelligence

“It is important to recognize that believing intelligence to be malleable does not imply that everyone has exactly the same potential in every domain, or will learn everything with equal ease.

Rather, it means that for any given individual, intellectual ability can always be further developed.”

Learned Helplessness: The Failure Cycle

Students with a history of school failure are at particular risk of falling into the learned-helplessness cycle:

1. The student experiences academic failure...
2. ...which undermines self-confidence in their intellectual abilities.
3. The student begins to doubt that their efforts will overcome their learning difficulties...
4. ...causing that student to reduce efforts toward academic achievement.
5. ...resulting in continued failure...
6. ...and reinforcing the student's belief that they lack the ability to learn.

### Contrasting Mindsets: Responses to Setbacks

<table>
<thead>
<tr>
<th>Fixed Mindset: The student may:</th>
<th>Growth Mindset: The student will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• give up</td>
<td>• view setback as an opportunity for learning</td>
</tr>
<tr>
<td>• withdraw effort</td>
<td>• increase effort</td>
</tr>
<tr>
<td>• ‘disidentify’ with challenge subject: e.g., “I don’t like math much anyway.”</td>
<td>• figure out deficiencies in work or study processes and correct them</td>
</tr>
<tr>
<td>• be at greater risk for cheating</td>
<td></td>
</tr>
</tbody>
</table>

Mindsets: Fixed vs. Growth

“[Fixed vs. growth] mindsets affect students' achievement by creating different psychological worlds.”

Dr. Carol Dweck

Mindsets: Fixed vs. Growth

Does a student’s type of mindset have a significant impact on school performance?

When students are not experiencing significant learning challenges, those with fixed and growth mindsets may do equally well.

However, during times of difficult academic work or dramatic changes in the learning environment (e.g., middle school), growth-mindset students tend to do significantly better than their fixed-mindset peers.

Fixed-Mindset Statements: What NOT to Say

Fixed-mindset statements reinforce the (untrue) idea that individuals have a fixed quantity of 'ability' that cannot expand much despite the learner’s efforts. Avoid statements that send a fixed-mindset message to students, such as:

• “Excellent essay. You are a natural-born writer!”
• “You need to work harder. I have seen your grades and know that you are smart enough to get an A in this course.”
• “It’s OK—not everyone can be good at math.”
To Promote a ‘Growth Mindset’ . . . Use Process-Oriented Statements

Teachers’ growth-mindset statements are varied. However, they tend to include these elements:

- **CHALLENGE.** The teacher acknowledges that the learning task is difficult—but frames that challenge as an opportunity to learn.

- **PROCESS.** The teacher identifies the specific process that the student should follow to accomplish the academic task.

- **CONFIDENCE.** The teacher provides assurance that the student can be successful if the learner puts in sufficient effort and follows the recommended process.

Integrate ‘Pro-Growth-Mindset’
Statements into Classroom Discourse

In day-to-day communication with students, instructors have many opportunities use growth-mindset principles to infuse their statements with optimism, including:

- praise
- work-prompts
- encouragement
- introduction of assignments

Work Prompt

"Sarah, please keep reading....you still have 10 minutes to work on the assignment.

It's a challenging passage, so if you get stuck, be sure to use your reading fix-up skills.

Remember, it's also OK to ask a neighbor or to come to me for help.

Use your strategies and you will be successful!"
When students stop working during an independent assignment, the teacher can structure the "get-back-to-work" prompt to follow a growth-mindset format.

**EXAMPLE:**

"Sarah, please keep reading...you still have 10 minutes to work on the assignment. It's a challenging passage, so if you get stuck, be sure to use your reading fix-up skills. Remember, it's also OK to ask a neighbor or to come to me for help. Use your strategies and you will be successful!"
Assignment
"You should plan spend at least 90 minutes on tonight's math homework.

When you start the assignment, some problems might look like they are too difficult to solve.

But if you give it your best and follow your problem-solving checklist, you should be able to answer them."
Growth Mindset: Teacher Examples

Assignment

The teacher can give assignments a growth-mindset spin—describing challenge(s), appraising the effort required, reminding what strategies or steps to use, and stating confidently that following the process will lead to success.

EXAMPLE:

"You should plan to spend at least 90 minutes on tonight's math homework.

When you start the assignment, some problems might look like they are too difficult to solve.

But if you give it your best and follow your problem-solving checklist, you should be able to answer them."
**Wise Feedback.** Increase Acceptance of Academic Feedback

- **What It Is.** Wise feedback follows a specific structure to signal to the student that the critical feedback is well-intentioned and appropriately matched to the student’s abilities.

Critical Feedback. The Problem...

The intention of teachers’ instructional feedback is often ambiguous, leaving learners free to impose their own interpretations.

Students already sensitive to being stereotyped (e.g., because of race, gender, or economic class) may construe teacher feedback in a negative light—as a sign of stereotyping or bias (Cohen, Steele, & Ross, 1999; Yeager et al., 2013). So the student ‘tunes out’ that adult feedback—resulting in the ‘mentor’s dilemma’.


‘Wise’ Feedback. Formatting Critical Feedback to Promote Student Acceptance

‘Wise feedback’ prevents the student from taking criticism about their work personally. Written or verbal feedback about a student’s academic performance follows this format:

– FEEDBACK DESCRIPTION. The teacher describes the nature of the feedback being offered.

– HIGH STANDARDS. The teacher emphasizes and explains the high standards used to evaluate the student work.

– ASSURANCE OF ABILITY. The teacher states explicitly his or her confidence that the student has the skills necessary to successfully meet those standards.

Wise Feedback: Student Paper

Feedback Description
“Your paper met the basic requirements of the assignment but needs work. Please look over my comments. You will see that I give detailed feedback.”

High Standards
“The expectation in this class is that you will take your writing to a level suitable for college or business communication.”

Assurance of Student Ability
“My past writing assignments have shown me that you have the skills and motivation to use my feedback to revise and improve this paper.”
Wise Feedback: Additional Suggestions…

• **Do not pair grades with wise feedback.** When possible, teachers should avoid attaching grades to any student work that contains wise feedback.

Students tend to view a summative number or letter grade as the ‘real’ evaluation of an assignment and are therefore likely to ignore comments that accompany them (Yeager et al., 2013). So grades can ‘short-circuit’ the positive impact of wise feedback.

One strategy to keep wise-feedback and grading separate on an assignment is to return the first draft of the assignment ungraded with wise feedback. The student is then directed to use the feedback to revise the assignment and submit for a grade.
Wise Feedback: Additional Suggestions…

• Make student feedback ‘ambitious’. In an attempt to bond with unmotivated students, the teacher may over-praise them for mediocre work or provide only easy suggestions for improving the assignment.

Either strategy sets a low bar for performance and can backfire. When students sense that instructors have limited expectations of them, they can feel patronized and stereotyped, lose motivation, and further withdraw effort from academic tasks (Yeager et al., 2013).

Instead, the teacher should praise work that truly deserves it and offer ambitious feedback appropriate to students’ skill level.
LAB WORK: Using Motivational Teacher Communication Tools

This workshop highlights strategies that teachers use to increase student motivation and optimism, including:

- change talk
- praise
- growth mindset statements
- wise feedback

In your discussion groups, select one of these 4 strategies. Share examples of how you have successfully used your selected strategy to encourage students to be more motivated, self-directed, learners.
Interventions for Math.
What are examples of classroom interventions to address math deficits?
## Five Strands of Mathematical Proficiency

1. **Understanding.** Comprehending mathematical concepts, operations, and relations—knowing what mathematical symbols, diagrams, and procedures mean.

2. **Computing.** Carrying out mathematical procedures, such as adding, subtracting, multiplying, and dividing numbers flexibly, accurately, efficiently, and appropriately.

3. **Applying.** Being able to formulate problems mathematically and to devise strategies for solving them using concepts and procedures appropriately.

4. **Reasoning.** Using logic to explain and justify a solution to a problem or to extend from something known to something less known.

5. **Engaging.** Seeing mathematics as sensible, useful, and doable—if you work at it—and being willing to do the work.

---

The Math-Challenged Student: 12-Pt Profile

2. Difficulty understanding math concepts/abstractions.
3. Limited attention span (difficulty remaining on-task).
4. Difficulty with spatial awareness.
5. Failure to apply previously learned knowledge.
6. Unable to apply math concepts/reasoning to real-life situations.
7. Struggle with visual sequencing—the ability to see objects in a sequential order (e.g., copying from the board, sequencing numbers).
8. Confusion of various math signs and symbols.
10. Limited reading skills (e.g., comprehension).
11. Difficulty following directions.

<table>
<thead>
<tr>
<th>Math Interventions</th>
<th>Timely Work Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math Fact Fluency</strong></td>
<td><strong>Student Self-Monitoring</strong></td>
</tr>
<tr>
<td>• Explicit Time Drill</td>
<td>• Problem-Interspersal Technique</td>
</tr>
<tr>
<td>• Incremental Rehearsal</td>
<td></td>
</tr>
<tr>
<td>• Cover-Copy-Compare</td>
<td>• Math Self-Correction Checklist</td>
</tr>
<tr>
<td>• Peer Tutoring: Math Facts</td>
<td></td>
</tr>
<tr>
<td><strong>Math Word Problems</strong></td>
<td><strong>Math Anxiety</strong></td>
</tr>
<tr>
<td>• STAR Self-Guided Strategy: Search-Translate-Answer-Review</td>
<td>• Antecedent (‘Anxiety’) Essay</td>
</tr>
</tbody>
</table>
Sample Strategies to Promote…
Acquisition/Fluency of Math Facts

• Explicit Time Drill
• Incremental Rehearsal
• Cover-Copy-Compare
• Peer Tutoring/Constant Time Delay
Computation Fluency: Benefits of Automaticity of ‘Arithmetic Combinations’ (Gersten, Jordan, & Flojo, 2005)

- There is a strong correlation between poor retrieval of arithmetic combinations (‘math facts’) and global math delays
- Automatic recall of arithmetic combinations frees up student ‘cognitive capacity’ to allow for understanding of higher-level problem-solving
- By internalizing numbers as mental constructs, students can manipulate those numbers in their head, allowing for the intuitive understanding of arithmetic properties, such as associative property and commutative property

Math Fact Fluency: Explicit Time Drill

The teacher hands out a math-fact worksheet. Students are told that they will have 3 minutes to work on problems on the sheet. The teacher starts the stop watch and tells the students to start work. At the end of the first minute, 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 restarts the stopwatch. This process is repeated at the end of minutes 2 and 3. At the conclusion of the 3 minutes, the teacher collects the student worksheets (Rhymer et al., 2002).
Math Review: Incremental Rehearsal of ‘Math Facts’

Step 1: The tutor writes down on a series of index cards the math facts that the student needs to learn. The problems are written without the answers.

<table>
<thead>
<tr>
<th>4 x 5 =</th>
<th>2 x 6 =</th>
<th>5 x 5 =</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x 2 =</td>
<td>3 x 8 =</td>
<td>5 x 3 =</td>
</tr>
<tr>
<td>6 x 5 =</td>
<td>9 x 2 =</td>
<td>3 x 6 =</td>
</tr>
<tr>
<td>8 x 2 =</td>
<td>4 x 7 =</td>
<td>8 x 4 =</td>
</tr>
<tr>
<td>9 x 7 =</td>
<td>7 x 6 =</td>
<td>3 x 5 =</td>
</tr>
</tbody>
</table>
Math Review: Incremental Rehearsal of ‘Math Facts’

Step 2: The tutor reviews the ‘math fact’ 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.

<table>
<thead>
<tr>
<th>‘KNOWN’ Facts</th>
<th>‘UNKNOWN’ Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 x 5 = ___</td>
<td>3 x 8 = ___</td>
</tr>
<tr>
<td>2 x 6 = ___</td>
<td>3 x 2 = ___</td>
</tr>
<tr>
<td>3 x 2 = ___</td>
<td>5 x 3 = ___</td>
</tr>
<tr>
<td>3 x 6 = ___</td>
<td>8 x 4 = ___</td>
</tr>
<tr>
<td>6 x 5 = ___</td>
<td>5 x 5 = ___</td>
</tr>
<tr>
<td>9 x 7 = ___</td>
<td>8 x 2 = ___</td>
</tr>
<tr>
<td>7 x 6 = ___</td>
<td>3 x 5 = ___</td>
</tr>
</tbody>
</table>
Math Review: Incremental Rehearsal of ‘Math Facts’

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’ math fact. The tutor reads the problem aloud, gives the answer, then prompts the student to read off the same unknown problem and provide the correct answer.

$$3 \times 8 = \_$$
Math Review: Incremental Rehearsal of ‘Math Facts’

Step 3: Next the tutor takes a math fact from the ‘known’ pile and pairs it with the unknown problem. When shown each of the two problems, the student is asked to read off the problem and answer it.

3 x 8 = __  
4 x 5 = __
Math Review: Incremental Rehearsal of ‘Math Facts’

Step 3: The tutor then repeats the sequence—adding yet another known problem to the growing deck of index cards being reviewed and each time prompting the student to answer the whole series of math facts—until the review deck contains a total of one ‘unknown’ math fact and nine ‘known’ math facts.

\[
\begin{align*}
3 \times 8 &= \_ \\
4 \times 5 &= \_ \\
2 \times 6 &= \_
\end{align*}
\]

\[
\begin{align*}
3 \times 2 &= \_ \\
3 \times 6 &= \_ \\
5 \times 3 &= \_
\end{align*}
\]

\[
\begin{align*}
8 \times 4 &= \_ \\
6 \times 5 &= \_ \\
4 \times 7 &= \_
\end{align*}
\]
Math Review: Incremental Rehearsal of ‘Math Facts’

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

3 x 8 = __ 4 x 5 = __ 2 x 6 = __
3 x 2 = __ 3 x 6 = __ 5 x 3 = __
8 x 4 = __ 6 x 5 = __ 4 x 7 = __
Math Review: Incremental Rehearsal of ‘Math Facts’

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

9 x 2 = __  
3 x 8 = __  
4 x 5 = __  
2 x 6 = __  
3 x 2 = __  
3 x 6 = __  
5 x 3 = __  
8 x 4 = __  
6 x 5 = __
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 × 7 = 63</td>
<td>1a. 9 × 7 = 63</td>
</tr>
<tr>
<td>2. 9 × 2 = 18</td>
<td></td>
</tr>
<tr>
<td>3. 9 × 4 = 36</td>
<td></td>
</tr>
<tr>
<td>4. 9 × 1 = 9</td>
<td></td>
</tr>
<tr>
<td>5. 9 × 9 = 81</td>
<td></td>
</tr>
<tr>
<td>6. 9 × 6 = 54</td>
<td></td>
</tr>
<tr>
<td>7. 9 × 3 = 27</td>
<td></td>
</tr>
<tr>
<td>8. 9 × 5 = 45</td>
<td></td>
</tr>
<tr>
<td>9. 9 × 10 = 90</td>
<td></td>
</tr>
<tr>
<td>10. 9 × 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

**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 cards, the tutor shuffles them before again presenting cards.
Peer Tutoring in Math Computation with Constant Time Delay

**Progress-Monitoring Activity.** The tutor concludes each 3-minute tutoring session by assessing the number of math facts mastered by the tutee. The tutor follows this sequence:

- *Presents Cards.* The tutor presents each card to the tutee for 3 seconds.

- *Remains Silent.* The tutor does not provide performance feedback or praise to the tutee, or otherwise talk during the assessment phase.

- *Sorts Cards.* Based on the tutee’s responses, the tutor sorts the math-fact cards into ‘correct’ and ‘incorrect’ piles.

- *Counts Cards and Records Totals.* The tutor counts the number of cards in the ‘correct’ and ‘incorrect’ piles and records the totals on the tutee’s progress-monitoring chart.
Peer Tutoring in Math Computation: Score Sheet

<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>
</tbody>
</table>
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>
<th>NOTES</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>
<td></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>
<td></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>
<td></td>
</tr>
<tr>
<td>_Y__N</td>
<td>4.</td>
<td>Provides Praise. The tutor praises the tutee immediately following correct answers.</td>
<td></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>
<td></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>
<td></td>
</tr>
</tbody>
</table>
Peer Tutoring in Math Computation: Intervention Integrity Sheet  
(Part 2: Progress-Monitoring)

<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>Presents Cards. The tutor presents each card to the tutee for 3 seconds.</td>
</tr>
<tr>
<td>_Y__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>
</tr>
<tr>
<td>_Y__N</td>
<td>3.</td>
<td>Sorts Cards. The tutor sorts cards into 'correct' and 'incorrect' piles based on the tutee's responses.</td>
</tr>
<tr>
<td>_Y__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>
</tr>
</tbody>
</table>
Sample Strategy to Promote... Solution of Math Word Problems

- STAR: Improving Performance on Math Word Problem-Solving
STAR: Improving Performance on Math Word Problems

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

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

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

STAR: Solving Math Word Problems: 4-Step Strategy
### STAR: Solving Math Word Problems

Student Name: ____________________________

Directions: Use this step-by-step organizer as you solve each math word problem.

<table>
<thead>
<tr>
<th>Step</th>
<th>What I Do</th>
<th>My Workspace</th>
</tr>
</thead>
</table>
| **Search.** | I search the problem for important information by:  
reading it aloud  
highlighting key words  
crossing out information that is not important. |              |
| **Translate** | I translate the word problem into a number sentence. I can:  
arrange counters/objects to understand the problem  
draw the problem  
explain the problem in my own words. |              |
| **Answer** | I answer the problem. When doing this, I:  
consider the math operations I will use  
think about the steps I will follow and their proper order  
check my numbers to make sure they are written clearly and are placed correctly  
show my work. |              |
| **Review** | I review my answer to make sure it is correct. To do this, I:  
recheck my calculations  
reread the problem and ask myself whether my answer makes sense. |              |
Sample Strategy to Promote...Timely Math Work Completion
Math Computation: Problem Interspersal Technique

- The teacher first identifies the range of ‘challenging’ problem-types (number problems appropriately matched to the student’s current instructional level) that are to appear on the worksheet.

- Then the teacher creates a series of ‘easy’ problems that the students can complete very quickly (e.g., adding or subtracting two 1-digit numbers). The teacher next prepares a series of student math computation worksheets with ‘easy’ computation problems interspersed at a fixed rate among the ‘challenging’ problems.

- The ratio of easy to challenge problems can vary from 1:1 for student-completed independent work to 3:1 for problems that are read aloud by another and the student responds.

PROBLEM-INTERSPERSAL TECHNIQUE: WITHIN AN ASSIGNMENT. The teacher selects a ratio of ‘easy-to-challenge’ problems or items (e.g., 3:1). The instructor then formats the assignment or worksheet according to the ‘easy-to-challenge’ ratio.

<table>
<thead>
<tr>
<th>Problem-Interspersal Technique: Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Easy</strong></td>
</tr>
<tr>
<td><strong>Easy</strong></td>
</tr>
<tr>
<td><strong>Easy</strong></td>
</tr>
<tr>
<td><strong>Challenge</strong></td>
</tr>
</tbody>
</table>
Sample Strategy to Promote...Student Self-Monitoring
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.


Increase Student Math Success with Customized Math Self-Correction Checklists

MATERIALS:

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

Sources:

# Math Self-Correction Checklist

**Student Name:** ___________________________  **Date:** ___________________________

**Rater:** Student  **Classroom:** ___________________________

**Directions:** To the Student: BEFORE YOU START: Look at each of these goals for careful math work before beginning your assignment.

AFTER EACH PROBLEM: Stop and rate YES or NO whether you performed each goal correctly.

<table>
<thead>
<tr>
<th>I underlined all numbers at the top of the subtraction problem that were smaller than their matching numbers at the bottom of the problem.</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>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>! YES</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I wrote all numbers carefully so that I could read them easily and not mistake them for other numbers.</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>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>! YES</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I lined up all numbers in the right place-value columns.</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>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>! YES</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I rechecked all of my answers.</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>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>! YES</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sample Strategy to Reduce...Anxiety
Managing Academic Anxiety Through an Antecedent Writing Activity (Online)

**Description.** Students may become anxious when faced with academic tasks such as test-taking—to the point at which the anxiety seriously interferes with their work performance.

Being barraged with anxious thoughts while trying to complete academic tasks is a negative form of multi-tasking and taxes working memory (Beilock & Willingham, 2014). Anxious thoughts divert attention and thus degrade student performance.

Managing Academic Anxiety Through an Antecedent Writing Activity

Description (Cont.) One strategy that can help students to minimize the intrusion of anxious thoughts during a stressful test or assignment is to have them first complete a brief (7-to 10-minute) writing exercise in which they write about their anxiety (Park, Ramirez, & Beilock, 2014).

This activity can lower anxiety levels and thus allow the student to complete the academic task without interference.

Managing Academic Anxiety Through an Antecedent Writing Activity

Procedure. Before an individual student or larger group begins an academic task likely to trigger anxiety, the teacher hands out a worksheet with these (or similar) instructions:

**Writing Exercise: This Assignment: How Are You Feeling?**

I would like you to write honestly about what you are thinking and feeling as you prepare to take this exam/start this assignment.

Because everyone is unique, there is no ‘correct response’ to this writing task. You should just describe as fully as you can your thoughts and feelings about the exam/assignment. You can also write about how your current thoughts and feelings might be the same as—or different from—those you experienced in similar past situations.

You will have ___ minutes to write. Please keep writing until you are told to stop. I will not collect this assignment.

Managing Academic Anxiety Through an Antecedent Writing Activity

Procedure (Cont.) The instructor gives students 7-10 minutes to complete the writing assignment.

Students are then instructed to put their compositions away (they are not collected).

The class then begins the high-stakes academic task.

Managing Academic Anxiety Through an Antecedent Writing Activity

Tips for Use. Here are suggestions for using this antecedent writing exercise:

- Administer to the entire class. Certain academic tasks, such as important tests, will trigger anxiety in many, if not most, students in a classroom. Teachers can use this writing exercise with the entire group as an efficient way to ‘take the edge off’ this anxiety for all students and potentially improve their test performance.

Math Interventions: Activity

- Discuss the interventions reviewed today.
- Select 1 idea that you would like to try in your classroom/school.

### Math Interventions

<table>
<thead>
<tr>
<th>Math Fact Fluency</th>
<th>Timely Work Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit Time Drill</td>
<td>Problem-Interspersal Technique</td>
</tr>
<tr>
<td>Incremental Rehearsal</td>
<td>Student Self-Monitoring</td>
</tr>
<tr>
<td>Cover-Copy-Compare</td>
<td>Math Self-Correction Checklist</td>
</tr>
<tr>
<td>Peer Tutoring: Math Facts</td>
<td>Math Anxiety</td>
</tr>
<tr>
<td>STAR Self-Guided Strategy: Search-Translate-Answer-Review</td>
<td>Antecedent (‘Anxiety’) Essay</td>
</tr>
</tbody>
</table>

www.interventioncentral.org
What Classroom Supports Help a Struggling Student?

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

2. **INTERVENTIONS.** The student receives research-based interventions to help them to succeed in core instruction.

3. **ACCOMMODATIONS.** The student has access to classroom accommodations as needed to reach grade-level potential.

4. **PLAN.** The student has a written intervention plan.

5. **DATA.** The student has assessment data collected to better understand the academic delay and/or to track progress.
Activity: What Are Your Next Steps?

Identify 2-3 ‘next steps’ to use key ideas and resources from this data-collection training back in your classroom or school.