



RTI/MTSS Classroom Teacher Toolkit

The Teacher as Literacy First Responder: Practical Differentiation & Intervention Tools for the K-5 Classroom

Jim Wright, Presenter

16 October 2018

Sponsored by: Division of Teaching and
Learning/New York City Department of Education

Email: jimw13159@gmail.com

Workshop Materials: http://www.interventioncentral.org/nyc_rti_reading

How To: Create a Written Record of Classroom Interventions

When general-education students begin to struggle with academic or behavioral issues, the classroom teacher will typically select and implement one or more evidence-based intervention strategies to assist those students. But a strong intervention plan needs more than just well-chosen interventions. It also requires 4 additional components (Witt, VanDerHeyden, & Gilbertson, 2004): (1) student concerns should be clearly and specifically defined; (2) one or more methods of formative assessment should be used to track the effectiveness of the intervention; (3) baseline student data should be collected prior to the intervention; and (4) a goal for student improvement should be calculated before the start of the intervention to judge whether that intervention is ultimately successful. If a single one of these essential 4 components is missing, the intervention is to be judged as fatally flawed (Witt, VanDerHeyden, & Gilbertson, 2004) and as not meeting minimum Response to Intervention standards.

Teachers need a standard format to use in documenting their classroom intervention plans. The *Classroom Intervention Planning Sheet* that appears later in this article is designed to include all of the essential documentation elements of an effective intervention plan. The form includes space to document:

- *Case information.* In this first section of the form, the teacher notes general information, such as the name of the target student, the adult(s) responsible for carrying out the intervention, the date the intervention plan is being created, the expected start and end dates for the intervention plan, and the total number of instructional weeks that the intervention will be in place. Most importantly, this section includes a description of the student problem; research shows that the most significant step in selecting an effective classroom intervention is to correctly identify the target student concern(s) in clear, specific, measureable terms (Bergan, 1995).
- *Intervention.* The teacher describes the evidence-based intervention(s) that will be used to address the identified student concern(s). As a shortcut, the instructor can simply write the intervention name in this section and attach a more detailed intervention script/description to the intervention plan.
- *Materials.* The teacher lists any materials (e.g., flashcards, wordlists, worksheets) or other resources (e.g., Internet-connected computer) necessary for the intervention.
- *Training.* If adults and/or the target student require any training prior to the intervention, the teacher records those training needs in this section of the form.
- *Progress-Monitoring.* The teacher selects a method to monitor student progress during the intervention. For the method selected, the instructor records what type of data is to be used, collects and enters student baseline (starting-point) information, calculates an intervention outcome goal, and notes how frequently he or she plans to monitor the intervention.

A completed example of the *Classroom Intervention Planning Sheet* that includes a math computation intervention can be found later in this article.

While a simple intervention documentation form is a helpful planning tool, schools should remember that teachers will need other resources and types of assistance as well to be successful in selecting and using classroom interventions. For example, teachers should have access to an 'intervention menu' that contains evidence-based strategies to address the most common academic and behavioral concerns and should be able to get coaching support as they learn how to implement new classroom intervention ideas.

References

Bergan, J. R. (1995). Evolution of a problem-solving model of consultation. *Journal of Educational and Psychological Consultation*, 6(2), 111-123.

Witt, J. C., VanDerHeyden, A. M., & Gilbertson, D. (2004). Troubleshooting behavioral interventions. A systematic process for finding and eliminating problems. *School Psychology Review*, 33, 363-383.

Classroom Intervention Planning Sheet

This worksheet is designed to help teachers to quickly create classroom plans for academic and behavioral interventions.

Case Information		
<p>What to Write: Record the important case information, including student, person delivering the intervention, date of plan, start and end dates for the intervention plan, and the total number of instructional weeks that the intervention will run.</p>		
Student:	Interventionist(s):	Date Intervention Plan Was Written:
Date Intervention is to Start:	Date Intervention is to End:	Total Number of Intervention Weeks:
Description of the Student Problem:		

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

Materials	Training
<p>What to Write: Jot down materials (e.g., flashcards) or resources (e.g., Internet-connected computer) needed to carry out this intervention.</p>	<p>What to Write: Note what training--if any--is needed to prepare adult(s) and/or the student to carry out the intervention.</p>

Progress-Monitoring	
<p>What to Write: Select a method to monitor student progress on this intervention. For the method selected, record what type of data is to be used, enter student baseline (starting-point) information, calculate an intervention outcome goal, and note how frequently you plan to monitor the intervention. Tip: Several ideas for classroom data collection appear on the right side of this table.</p>	
Type of Data Used to Monitor:	
Baseline	Outcome Goal
How often will data be collected? (e.g., daily, every other day, weekly):	
<p>Ideas for Intervention Progress-Monitoring</p> <ul style="list-style-type: none"> Existing data: grades, homework logs, etc. Cumulative mastery log Rubric Curriculum-based measurement Behavior report card Behavior checklist 	

Classroom Intervention Planning Sheet

This worksheet is designed to help teachers to quickly create classroom plans for academic and behavioral interventions.

Case Information					
What to Write: Record the important case information, including student, person delivering the intervention, date of plan, start and end dates for the intervention plan, and the total number of instructional weeks that the intervention will run.					
Student:	Sandra S.	Interventionist(s):	Mrs. Thomas	Date Intervention Plan Was Written:	Dec 5, 2016
Date Intervention is to Start:	Dec 12, 2016	Date Intervention is to End:	Jan 20, 2017	Total Number of Intervention Weeks:	5 weeks
Description of the Student Problem:		Sandra has difficulty retaining essential information from assigned informational passages.			

Intervention
What to Write: Write a brief description of the intervention(s) to be used with this student. TIP: If you have a script for this intervention, you can just write its name here and attach the script to this sheet.
<p>Repeated Reading with Written Retell The teacher and other adults working with Sandra will use this strategy whenever Sandra is assigned a challenging passage to read.</p>

Materials	Training
What to Write: Jot down materials (e.g., flashcards) or resources (e.g., Internet-connected computer) needed to carry out this intervention.	What to Write: Note what training--if any--is needed to prepare adult(s) and/or the student to carry out the intervention.
Copy of reading retell student recording sheet.	Teach Sandra to use the RR strategy (1-2 sessions).

Progress-Monitoring	
What to Write: Select a method to monitor student progress on this intervention. For the method selected, record what type of data is to be used, enter student baseline (starting-point) information, calculate an intervention outcome goal, and note how frequently you plan to monitor the intervention. Tip: Several ideas for classroom data collection appear on the right side of this table.	
Type of Data Used to Monitor:	Readiness Assessment Test (Quiz)
Baseline	Outcome Goal
3-wk quiz average: 2.8 (of possible 5 points)	Final wk quiz average: 4.0 or higher
How often will data be collected? (e.g., daily, every other day, weekly):	
Weekly	
<p>Ideas for Intervention Progress-Monitoring</p> <ul style="list-style-type: none"> Existing data: grades, homework logs, etc. Cumulative mastery log Rubric Curriculum-based measurement Behavior report card Behavior checklist 	

How To: Define Academic Problems: The First Step in Effective Intervention Planning

Students who struggle with academic deficits do not do so in isolation. Their difficulties are played out in the larger context of the school environment and curriculum—and represent a ‘mismatch’ between the characteristics of the student and the instructional demands of the classroom (Foorman & Torgesen, 2001).

It may surprise educators to learn that the problem-identification step is the most critical for matching the student to an effective intervention (Bergan, 1995). Problem identification statements should be defined in clear and specific terms sufficient to pass ‘the stranger test’ (Howell, Hosp, & Kurns, 2008). That is, the student problem can be judged as adequately defined if a person with no background knowledge of the case and equipped only with the problem-identification statement can observe the student in the academic setting and know with confidence when the problem behavior is displayed and when it is not.

Here are recommendations for increasing teacher capacity to describe student academic problems in specific terms, and generate a hypothesis about why the problem is occurring.

1. **Describe the academic problem in specific, skill-based terms with a meaningful instructional context** (Batsche et al., 2008; Upah, 2008). Write a clear, brief description of the academic skill or performance deficit that focuses on a specific skill or performance area. Include information about the conditions under which the academic problem is observed and typical or expected level of performance.

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

Academic Problems: Sample Definitions		
Environmental Conditions or Task Demands	Problem Description	Typical or Expected Level of Performance
When shown flashcards with mixed-case letters for 3 seconds	Annika can name 38 of 52 correctly	while most peers in her class can name all letters correctly.
When asked to blend / segment onsets and rimes of single-syllable spoken words	Thomas (grade 1) is inconsistent in this skill	while this is a Kindergarten ELA/Reading standard.
When shown CVC words from all vowel families via flashcards	Terrance requires adult prompting, hints, and occasional direction to sound out and blend the words	while classmates perform the task with prompting only.
When reading aloud from a 1-minute 4 th -grade passage	Benjamin reads an average of 45 words	while the fall norm (20 th percentile) at Grade 4 is 68 words per minute.

When completing sets of 5 short-answer questions based on assigned readings	Neda scores an average of 40% (2 of 5 correct)	while classmates score an average of 80%.
When directed to match terms and definitions for 20 social-studies terms...	Lucy can correctly match 10 items	while this entry-level vocabulary is a prerequisite for the course.

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).

Academic Problems: Determining the Root Cause (Hypothesis)	
Struggling students can appear quite similar on the surface. They might be reluctant to engage in academic tasks, seem to work more slowly than peers, and lack the range of academic skills expected for their grade-level. In fact, though, there are differing explanations for why a student might encounter roadblocks to learning. This table lists the most frequent 'root causes' of classroom learning problems. When teachers select a specific cause as the most likely explanation for a student's academic difficulties, that hypothesis acts as a compass needle, pointing toward interventions that most logically address the student academic problems.	
Hypothesis	Recommendation
<ul style="list-style-type: none"> • <i>Skill Deficit.</i> The student has not yet acquired the skill(s). 	Provide direct, explicit instruction to acquire the skill. Reinforce the student for effort and accuracy.
<ul style="list-style-type: none"> • <i>Fluency Deficit.</i> The student has acquired the skill(s) but is not yet proficient. 	Provide opportunities for the student to practice the skill and give timely performance feedback. Reinforce the student for fluency as well as accuracy.
<ul style="list-style-type: none"> • <i>Retention Deficit.</i> The student can acquire the skill(s) but has difficulty retaining it over an extended period. 	Give the student frequent opportunities for practice to entrench a skill and help the student to retain it over time. Begin by scheduling more numerous practice episodes within a short time ('massed review') to promote initial fluency and then strengthen longer-term skill retention by scheduling additional periodic review ('distributed review') across longer spans of several weeks or more.
<ul style="list-style-type: none"> • <i>Endurance Deficit.</i> The student can perform the academic task(s), but only for brief periods. 	<ul style="list-style-type: none"> • Provide scaffolding supports to help the student to perform the academic task. • In structuring lessons or independent work, gradually lengthen the period of time that the student spends in skills practice or use. • Have the student self-monitor active engagement in skill-building activities--setting daily, increasingly ambitious work goals and then tracking whether he or she successfully reaches those goals.
<ul style="list-style-type: none"> • <i>Generalization Deficit.</i> The student possesses the skill(s) but fails to use 	<ul style="list-style-type: none"> • Enlist adults to prompt and remind the student to use the target skills when needed. • Train the student to identify relevant characteristics of

<p>across appropriate situations or settings.</p>	<p>situations or settings when the skill should be used—and to self-monitor skill use.</p> <ul style="list-style-type: none"> • Provide incentives (e.g., praise, rewards) for the student to use the skill in the appropriate settings.
<ul style="list-style-type: none"> • <i>Learned Helplessness.</i> The student lacks confidence in his or her academic abilities and—as a result—withholds efforts. 	<ul style="list-style-type: none"> • Adjust the work to the student's ability level. • Use scaffolding and accommodation strategies to make the academic work more manageable, e.g., breaking larger tasks into smaller increments ("chunking"), allowing the student to take brief breaks during work sessions, etc. • Use positive communication techniques to build student motivation and optimism, including praise, growth-mindset statements, and wise feedback.

References

Batsche, G. M., Castillo, J. M., Dixon, D. N., & Forde, S. (2008). Best practices in designing, implementing, and evaluating quality interventions. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 177-193). Bethesda, MD: National Association of School Psychologists.

Bergan, J. R. (1995). Evolution of a problem-solving model of consultation. *Journal of Educational and Psychological Consultation, 6*(2), 111-123.

Foorman, B. R., & Torgesen, J. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research & Practice, 16*, 203-212.

Howell, K. W., Hosp, J. L., & Kurns, S. (2008). Best practices in curriculum-based evaluation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp.349-362). Bethesda, MD: National Association of School Psychologists.

Upah, K. R. F. (2008). Best practices in designing, implementing, and evaluating quality interventions. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 209-223). Bethesda, MD: National Association of School Psychologists.



Classroom Academic Skills: Look-Up Guide

Directions. Use this guide to help you to clearly identify and define a student's academic-skill delays.

Reading: Alphabetic Principle: Acquisition (Hudson et al., 2012).	
Check if Critical	Sub-Skill
<input type="checkbox"/>	<i>Letter-Sound Correspondence.</i> The student is able to identify the sounds corresponding to specific letters and letter combinations.
<input type="checkbox"/>	<i>Letter-Sound Blending.</i> The student can blend the letter sounds that make up a word to correctly pronounce that word.
<input type="checkbox"/>	<i>Grapheme-to-Phoneme Decoding.</i> The student can fluently decode all graphemes (letters and letter combinations) that correspond to a particular phoneme (basic unit of speech sound). For example, the student can correctly identify words in which <i>f</i> , <i>ph</i> , and <i>gh</i> represent the phoneme /f/.
<input type="checkbox"/>	<i>Phonogram Recognition.</i> The student is fluent in recognizing within-word phonograms (collections of letters common across groups of words such as -ake or -ick) that help to speed word decoding.
<i>Recommended Interventions.</i> Intervention options for acquisition of basic skills includes direct instruction and use of differentiation and scaffolding techniques.	

Reading: Vocabulary: Acquisition (Hudson et al., 2012).	
Check if Critical	Sub-Skill
<input type="checkbox"/>	<i>Sight-Word Vocabulary.</i> The student has a sufficient sight-word vocabulary available to support reading fluency.
<i>Recommended Interventions.</i> Intervention options for acquisition of basic skills includes direct instruction and use of differentiation and scaffolding techniques.	

Reading: Decoding: Fluency (Hudson et al., 2012).	
Check if Critical	Sub-Skill
<input type="checkbox"/>	<i>Efficient Use of Decoding Strategies.</i> The student decodes text fluently by (1) translating graphemes (letters) into their phonemes (sounds) and then blending graphemes into a word; (2) using recognition of phonograms (familiar letter combinations appearing within words) to aid in decoding; and (3) having a large collection of sight words memorized for instantaneous word recognition.
<i>Recommended Interventions.</i> Intervention options to build fluency in basic skills includes frequent skill-practice with feedback on accuracy and increased speed.	



Reading: Comprehension	
Check if Critical	Sub-Skill
<input type="checkbox"/>	<i>Reading Goal(s) & Prior Knowledge.</i> Before beginning an assigned reading, the student identifies reading goal(s) and taps prior knowledge of the topic to better understand the current passage.
<input type="checkbox"/>	<i>Monitoring Comprehension.</i> While reading, the student monitors understanding and applies comprehension fix-up strategies as needed.
<input type="checkbox"/>	<i>Main Idea.</i> In informational text, the student can summarize the main idea and key supporting details for each paragraph.
<input type="checkbox"/>	<i>Notes/Annotation.</i> The student annotates the text/jots notes to capture or react to key facts, events, and/or ideas.
<input type="checkbox"/>	<i>Story Grammar.</i> In fiction, the student applies a 'story grammar' (i.e., a knowledge of the conventions of character and plot development) to understand the narrative.
<i>Recommended Interventions.</i> To promote comprehension skills, the student is trained to use specific strategies during independent reading.	

Writing: Production		
Check if Critical	Sub-Skill	Recommended Interventions
<input type="checkbox"/>	<i>Writing Speed.</i> The student writes or types words on the page at a rate equal or nearly equal to that of classmates.	<ul style="list-style-type: none"> Teach keyboarding skills Allow student to dictate ideas into a tape-recorder and have a volunteer (e.g., classmate, parent, school personnel) transcribe them
<input type="checkbox"/>	<i>Handwriting.</i> The student's handwriting is legible to most readers.	<ul style="list-style-type: none"> Provide training in handwriting Teach keyboarding skills

Writing: Mechanics & Conventions		
Check if Critical	Sub-Skill	Recommended Interventions
<input type="checkbox"/>	<i>Grammar & Syntax.</i> Knowledge of grammar (rules governing use of language) and syntax (grammatical arrangement of words in sentences) is appropriate for age and/or grade placement	<ul style="list-style-type: none"> Teach rules of grammar, syntax Have students compile individualized checklists of their own common grammar/syntax mistakes; direct students to use the checklist to review work for errors before turning in
<input type="checkbox"/>	<i>Spelling.</i> Spelling skills are appropriate for age and/or grade placement	<ul style="list-style-type: none"> Have student collect list of own common misspellings; assign words from list to study; quiz student on list items Have student type assignments and use spell-check

Writing: Content		
Check if Critical	Sub-Skill	Recommended Interventions
<input type="checkbox"/>	<i>Vocabulary.</i> Vocabulary in written work is age/grade appropriate	<ul style="list-style-type: none"> Compile list of key vocabulary and related definitions for subject area; assign



		<p>words from list to study; quiz student on definitions of list items</p> <ul style="list-style-type: none"> Introduce new vocabulary items regularly to class; set up cooperative learning activities for students to review vocabulary
<input type="checkbox"/>	<i>Word Choice.</i> The student distinguishes word-choices that are appropriate for informal (colloquial, slang) written discourse vs. formal discourse	<ul style="list-style-type: none"> Present examples to the class of formal vs. informal word choices Have students check work for appropriate word choice as part of writing revision process
<input type="checkbox"/>	<i>Audience.</i> The student identifies targeted audience for writing assignments and alters written content to match needs of projected audience	<ul style="list-style-type: none"> Direct students to write a 'targeted audience profile' as a formal (early) step in the writing process; have students evaluate the final writing product to needs of targeted audience during the revision process
<input type="checkbox"/>	<i>Plagiarism.</i> The student identifies when to credit authors for use of excerpts quoted verbatim or unique ideas taken from other written works	<ul style="list-style-type: none"> Define plagiarism for students. Use plentiful examples to show students acceptable vs. unacceptable incorporation of others' words or ideas into written compositions

Writing: Preparation		
Check if Critical	Sub-Skill	Recommended Interventions
<input type="checkbox"/>	<i>Topic Selection.</i> The student independently selects appropriate topics for writing assignments	<ul style="list-style-type: none"> Have student generate list of general topics that that interest him or her; sit with the student to brainstorm ideas for writing topics that relate to the student's own areas of interest
<input type="checkbox"/>	<i>Writing Plan.</i> The student creates a writing plan by breaking larger writing assignments into sub-tasks (e.g., select topic, collect source documents, take notes from source documents, write outline, etc.)	<ul style="list-style-type: none"> Create generic pre-formatted work plans for writing assignments that break specific types of larger assignments (e.g., research paper) into constituent parts. Have students use these plan outlines as a starting point to making up their own detailed writing plans.
<input type="checkbox"/>	<i>Note-Taking.</i> The student researches topics by writing notes that capture key ideas from source material	<ul style="list-style-type: none"> Teach note-taking skills; have students review note-cards with the teacher as quality check.

Writing: Production & Revision		
Check if Critical	Sub-Skill	Recommended Interventions
<input type="checkbox"/>	<i>Adequate 'Seat Time'.</i> The student schedules sufficient time to the act of writing to ensure a quality final product.	<ul style="list-style-type: none"> Use teacher's experience and information from proficient student writers to develop estimates of minimum writing 'seat time' needed to produce quality products for 'typical' writing assignments (e.g., 5-



		<p>paragraph opinion essay; 10-page term paper). Share with students.</p> <ul style="list-style-type: none"> • Have students keep a writing diary to record amount of time spent in act of writing for each assignment. Require that this information be submitted along with the students' assignment. (Additional idea: Consider asking parents to monitor and record their child's writing time.)
<input type="checkbox"/>	<i>Oral vs. Written Work.</i> The student's dictated and written passages are equivalent in complexity and quality.	<ul style="list-style-type: none"> • Allow student to dictate ideas into a tape-recorder and have a volunteer (e.g., classmate, parent, school personnel) transcribe them • Permit the student to use speech-to-text software (e.g., Dragon Naturally Speaking) to dictate first drafts of writing assignments.
<input type="checkbox"/>	<i>Revision Process.</i> The student revises the initial written draft before turning in for a grade or evaluation.	<ul style="list-style-type: none"> • Create a rubric containing the elements of writing that students should review during the revision process; teach this rubric to the class; link a portion of the grade on writing assignments to students' use of the revision rubric.



Elements of Effective Writing Instruction

The Common Core State Standards place a heavy emphasis on writing skills. Yet writing instruction in schools often falls short in training students to be accomplished writers (Graham, McKeown, Kiuhare, & Harris, 2012). As a help to teachers, this article identifies nine elements of writing instruction found to be effective in classrooms ranging from later elementary to high school.

Several meta-analyses are the source for these instructional recommendations (Graham, McKeown, Kiuhare, & Harris, 2012; Graham & Herbert, 2010; Graham & Perrin, 2007). Meta-analysis is a statistical procedure that aggregates the findings of various individual studies--all focusing on one writing-instruction component--to calculate for that component a single, global estimate of effectiveness. The results of these meta-analyses are calculated as 'effect sizes'. An effect size is the estimate of the difference in academic performance between a treatment group (in this case, students receiving a specific writing-instruction treatment) and a control group that does not receive the treatment (Graham & Perrin, 2007). The larger the effect size, the more effective is the treatment. Below is a scale that can be used to evaluate the importance of the effect-sizes that appear with each writing-instruction element (Cohen, 1992; Graham & Herbert, 2010):

- 0.20: Small effect size
- 0.50: Medium effect size
- 0.80: Large effect size

Teachers are encouraged to use this listing of effective writing-instruction practices as a checklist against which to evaluate the quality of their own writing programs. However, the following considerations should be kept in mind:

1. *Recommendations are general--not specific.* Descriptions of these elements of writing instruction are quite general, because they are summarized from a collection of varied studies. Nonetheless, teachers can have confidence that, so long as their own classroom practice incorporates these general writing recommendations, they are more likely to deliver high-quality writing instruction.
2. *Ordering and weighting of writing strategies is unknown.* While the instructional strategies presented here have demonstrated effectiveness in improving student writing, researchers do not yet know the relative importance that each component has in developing student writing skills or in what order the components should appear (Graham & Hebert, 2010). Teacher judgment in the weighting and ordering of each component is required.
3. *Writing components should be explicitly taught.* Struggling writers will need explicit instruction in the various writing components (e.g., in how to work effectively on collaborative writing projects) in order to enjoy the maximum benefit from them (Graham & Hebert, 2010).

Recommended Writing-Instruction Components

Listed in descending order of effectiveness are these components of effective writing instruction:

1	Students follow a multi-step writing process. Effect sizes: 1.2 (Graham, McKeown, Kiuhare, & Harris, 2012); 0.82 (Graham & Perrin, 2007). Students are trained to use (and can produce evidence of) a multi-step writing process, including the elements of planning, drafting, revision, and editing (e.g., Robinson & Howell, 2008). They make use of this process for all writing assignments.
2	Students work collaboratively on their writing. Effect sizes: 0.89 (Graham, McKeown, Kiuhare, & Harris, 2012); 0.75 (Graham & Perrin, 2007).



	Students work on their writing in pairs or groups at various stages of the writing process: planning (pre-writing), drafting, revising, editing.
--	--

3	Students receive timely feedback about the quality of their writing. Effect sizes: 0.80 for adult feedback, 0.37 for student feedback (Graham, McKeown, Kiuhare, & Harris, 2012).
	Students receive regular performance feedback about the quality of a writing product from adults, peers, or through self-administered ratings (e.g., using rubrics). It should be noted that the impact of timely teacher feedback to young writers is especially large (effect size = 0.80).

4	Students set writing goals. Effect sizes: 0.76 (Graham, McKeown, Kiuhare, & Harris, 2012); 0.70 (Graham & Perrin, 2007).
	At various points in the writing process (planning, drafting, writing, revising), students are encouraged to formulate specific goals; they later report out (to the teacher or a peer) whether they have actually accomplished those goals. Examples of goal-setting might include locating at least 3 sources for a research paper, adding 5 supporting details during revision of an argumentative essay, writing the first draft of an introductory paragraph during an in-class writing period, etc.

5	Students use word processors to write. Effect sizes: 0.47 (Graham, McKeown, Kiuhare, & Harris, 2012); 0.55 (Graham & Perrin, 2007).
	Students become fluent in keyboarding and have regular access to word-processing devices when writing.

6	Students write about what they have read. Effect sizes: 0.40 (Graham & Herbert, 2010); 0.82 (Graham & Perrin, 2007).
	Students are explicitly taught how to summarize and/or reflect in writing on texts that they have recently read. Each of the following writing activities has been found to be effective in promoting writing skills -- as well as improving reading comprehension: <ul style="list-style-type: none"> • paraphrasing the original text as a condensed student summary • analyzing the text, attempting to interpret the text's meaning, or describing the writer's reaction to it • writing notes (e.g., key words or phrases) that capture the essential text information

7	Students engage in pre-writing activities. Effect sizes: 0.54 (Graham, McKeown, Kiuhare, & Harris, 2012); 0.30 (Graham & Perrin, 2007).
	Before beginning a writing assignment, students take part in structured tasks to plan or visualize the topic to be written about. Activities might include having students draw pictures relevant to the topic; write out a writing plan independently or in pairs or groups; read articles linked to the writing topic and discuss them before developing a writing plan, etc.

8	Students produce more writing. Effect size: 0.30 (Graham, McKeown, Kiuhare, & Harris, 2012).
	Students have more writing included in their daily instruction (e.g., through daily journaling).

9	Students study writing models. Effect size: 0.30 (Graham & Perrin, 2007).
	Students are given models of the kinds of writing that they will be asked to produce: e.g., argumentative or informational essays. Students closely study the structure of these models and attempt to incorporate the important elements of each model into their own writing.



References

- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, 1(3), 98-101.
- Graham, S., & Hebert, M. (2010). *Writing to Read: Evidence for how writing can improve reading*. Alliance for Excellence in Education. Washington, D.C.
- Graham, S., McKeown, D., Kiuhare, S., & Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, 104(4), 879-896.
- Graham, S., & Perrin, D. (2007). *Writing Next: Effective strategies to improve writing of adolescents in middle and high school*. Alliance for Excellence in Education. Washington, D.C.
- Robinson, L. K., & Howell, K. W. (2008). Best practices in curriculum-based evaluation and written expression. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 439-452). Bethesda, MD: National Association of School Psychologists.

Intervention & Related RTI Terms: Definitions

Educators who serve as interventionists should be able to define and distinguish among the terms *core instruction*, *intervention*, *instructional adjustment*, and *modification*. (In particular, interventionists should avoid using modifications as part of an RTI plan for a general education student, as they can be predicted to undermine the student's academic performance.) Here are definitions for these key terms.

- ❑ **Core Instruction.** Those instructional strategies that are used routinely with all students in a general-education setting are considered 'core instruction'. High-quality instruction is essential and forms the foundation of RTI academic support. NOTE: While it is important to verify that a struggling student receives good core instructional practices, those routine practices do not 'count' as individual student interventions.
- ❑ **Intervention.** An academic *intervention* is a strategy used to teach a new skill, build fluency in a skill, or encourage a child to apply an existing skill to new situations or settings. An intervention can be thought of as "a set of actions that, when taken, have demonstrated ability to change a fixed educational trajectory" (Methe & Riley-Tillman, 2008; p. 37). As an example of an academic intervention, the teacher may select question generation (Davey & McBride, 1986.; Rosenshine, Meister & Chapman, 1996), a strategy in which the student is taught to locate or generate main idea sentences for each paragraph in a passage and record those 'gist' sentences for later review.
- ❑ **Instructional Adjustment (Accommodation).** An *instructional adjustment* (also known as an 'accommodation') 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 instructional adjustment is intended to remove barriers to learning while still expecting that students will master the same instructional content as their typical peers. An instructional adjustment for students who are slow readers, for example, may include having them supplement their silent reading of a novel by listening to the book on tape. An instructional adjustment for unmotivated students may include breaking larger assignments into smaller 'chunks' and providing students with performance feedback and praise for each completed 'chunk' of assigned work (Skinner, Pappas & Davis, 2005).
- ❑ **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. Examples of modifications are giving a student five math computation problems for practice instead of the 20 problems assigned to the rest of the class or letting the student consult course notes during a test when peers are not permitted to do so. Instructional modifications are essential elements on the Individualized Education Plans (IEPs) or Section 504 Plans of many students with special needs. Modifications are generally not included on a general-education student's RTI intervention plan, however, because the assumption is that the student can be successful in the curriculum with appropriate interventions and instructional adjustments alone. In fact, modifying the work of struggling general education students is likely to have a negative effect that works *against* the goals of RTI. Reducing academic expectations will result in these students falling further behind rather than closing the performance gap with peers

References

Davey, B., & McBride, S. (1986). Effects of question-generation training on reading comprehension. *Journal of Educational Psychology*, 78, 256-262.

Methe, S. A., & Riley-Tillman, T. C. (2008). An informed approach to selecting and designing early mathematics interventions. *School Psychology Forum: Research into Practice*, 2, 29-41.

Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66, 181-221.

Skinner, C. H., Pappas, D. N., & Davis, K. A. (2005). Enhancing academic engagement: Providing opportunities for responding and influencing students to choose to respond. *Psychology in the Schools*, 42, 389-403.



How to Track Classroom Reading Interventions

When students are on MTSS Tier 1/classroom academic intervention plans, the teacher must monitor those learners' progress to judge if the intervention is effective. Because instructional time is precious, instructors want to know in weeks—not months—whether interventions are working. The goal, then, is for teachers to have at their fingertips a short list of data-collection methods to provide a steady stream of information on student progress toward reading goals. These measures should be feasible to use in busy classrooms and sensitive to short-term gains in student reading skills (Howell, Hosp, & Kurns, 2008).

This handout reviews teacher-friendly approaches to track initial acquisition of reading skills, growth in skill fluency, improved retention of information from assigned readings, and student independent use of reading strategies.

Acquisition: Measure mastery. In the acquisition stage of learning, the student is in the process of acquiring a new skill but cannot yet perform it with accuracy. Examples of reading skills that young learners must acquire are:

- Letter naming/sounds
- Sight words
- Vocabulary terms and definitions

The simplest way to measure student progress on acquisition-stage goals is repeated assessment using flashcards. Here are the steps for carrying out this assessment:

1. *Prepare flashcards.* Create a flashcard deck with all items in the collection that the student is working to master (e.g., letter-naming).
2. *Define mastery.* Develop criteria to define mastery performance for any item: e.g., "Mastery Criteria: When shown a letter, the student names it correctly within 3 seconds. The student is able to repeat this performance 3 times without error."
3. *Collect baseline data.* At the start of the intervention, conduct a baseline assessment to determine which of the items the student already knows. Show the student each flashcard and ask the student to respond. Applying the mastery criteria, sort the cards into "known" and "unknown" piles. For example, if a student hesitates for longer than 3 seconds to identify a letter name, that flashcard would be placed on the "unknown" pile. Log the flashcard items that the student knows and the date of the baseline assessment. The remaining unknown items become the focus of the acquisition intervention.
4. *Monitor progress.* During the acquisition intervention, periodically (e.g., weekly) review the flashcards with the student. Whenever the student masters an additional item (according to your mastery criteria), log the mastered item and date.
5. *Graph cumulative progress.* Often at the acquisition stage, the student is working to master a fixed number of academic items, such as letter names. A logical way to graph the student's progress is to create a cumulative graph. This graph will display from week to week how many items the student has mastered from the start of the intervention to the current date.

NOTE: Teachers can access a free form, the Cumulative Mastery Record, to organize and collect acquisition-stage reading data at:

http://interventioncentral.org/sites/default/files/workshop_files/allfiles/cumulative_mastery_record_interactive.pdf



Fluency: Measuring proficiency. When a student has acquired a basic reading skill, the next learning goal is to develop greater fluency, or speed, in that skill. The measurement goal of this fluency stage of learning is to track both continued accuracy and increasing speed in performing that skill.

A useful way to assess a student's growing fluency (as well as accuracy) in foundation literacy skills is via curriculum-based measurement (CBM) -- a family of quick assessments of basic academic skills. While CBM covers a wide range of different assessments, all are brief; timed; use standard procedures to prepare materials, administer, and score; and include decision rules to help educators to make appropriate instructional decisions (Hosp, Hosp & Howell, 2007). When classroom interventions target growth in basic reading skills such as letter identification or reading fluency, CBMs are the formative assessment of choice to assess growth.

There are a variety of measurement products on the market that have been designed using CBM research. The example presented here is a widely-used battery of fluency assessments for reading called DIBELS Next: <https://dibels.org/dibelsnext.html>. DIBELS Next is a well-researched collection of assessments available to teachers at no cost to download, print, and use with their students.

The DIBELS Next measures shown in Table 1 are brief (ranging in administration time from 1 to 3 minutes), are given under standardized conditions, and yield diagnostic information about a student's speed and accuracy on tasks relevant to the components of reading.

Measure	Reading Component(s) Assessed	Time to administer	Grade Range/Screening
First Sound Fluency (FSF). The examiner reads words aloud from a list. The student says the first sound for each word.	Phonemic Awareness	1 minute	<ul style="list-style-type: none"> Kdg: Fall & Winter screenings
Letter Naming Fluency (LNF). The student reads aloud the names of letters from a sheet with randomly arranged letters.	Alphabetic Principle/ Phonics	1 minute	<ul style="list-style-type: none"> Kdg: All year Grade 1: Fall screening
Phoneme Segmentation Fluency (PSF). The examiner reads words aloud from a list. The student says the individual sounds making up each word.	Phonemic Awareness	1 minute	<ul style="list-style-type: none"> Kdg: Winter & Spring screenings Grade 1: Fall screening
Nonsense Word Fluency (NWF). The student reads aloud from a list of VC and CVC nonsense words.	Alphabetic Principle/ Phonics	1 minute	<ul style="list-style-type: none"> Kdg: Winter & Spring screenings Grade 1: All year Grade 2: Fall screening
DIBELS Oral Reading Fluency (DORF). The student reads aloud from a text passage and is then asked to retell the main details of the reading.	Reading Fluency	1 minute for initial reading; 1 minute for student retell	<ul style="list-style-type: none"> Grade 1: Winter & Spring Screenings Grades 2-6: All year
Daze. The student is given a Maze passage to read silently. For each response item within the Maze, the student reviews 3 choices and selects the word that	Reading Comprehension	3 minutes	<ul style="list-style-type: none"> Grades 3-6: All year



best completes the meaning of that part of the passage.			
---	--	--	--

The DIBELS Next package of reading assessments can be used to screen an entire school for RTI/MTSS reading support. However, teachers also have the option to use DIBELS measures strategically with individual students, as the product includes national-benchmark performance norms for fall, winter, and spring.

Comprehension: Measuring retention of assigned readings. At times, the classroom teacher wishes to monitor whether intervention strategies to support comprehension are actually resulting in the student retaining more information from assigned readings. Here are two methods to assess retention of independent readings:

Readiness Assessment Tests (RATs). Readiness assessment tests (RATs) are a real-time means of measuring whether a student retains essential information from an assigned reading. RATs are brief teacher-made assignments that students complete *after* they have completed an assigned reading but *before* that reading is reviewed in class (Weinstein & Wu, 2009). RATs allow the instructor to monitor the retention of assigned readings for an individual student or the entire classroom.

The teacher identifies what information from the assigned reading is most relevant and constructs a small number of questions to test that knowledge. The instructor selects the RAT-question format: short-answer, essay, multiple-choice, or any combination. Finally, the teacher decides on the number of questions to include on the RAT, with 5 being a typical number.

Oral retell with rubric. Oral retell accompanied by a scoring rubric is a classroom-friendly way for an instructor to monitor student retention of key information from fiction and non-fiction reading assignments. The student completes the assigned reading. The instructor then prompts the student to recount the main points of that reading. During this exchange, the instructor uses a rubric to rate the organization and completeness of the student's retell. For example, the instructor may ask, "What are the main ideas that you recall from your reading?" and rate the student's response on a rubric as 3-*complete*, 2-*partial*, 1-*fragmentary*, or 0-*inaccurate/missing*.

Generalization: Measuring applied use of literacy skills. An important measurement target for teachers in higher grades is whether students are successfully and routinely using reading strategies independently. Work products and think-aloud checklists are 2 methods for monitoring student use of reading skills.

Work products. The teacher may be able to collect and review student work as a source of evidence that the reader is employing self-management strategies. Here are examples:

- Text annotation. Students can increase their retention of information when they interact actively with their reading by jotting comments in the margin of the text (Sarkisian et al., 2003). The teacher can collect assigned readings to review readers' annotations and verify successful use of the technique.
- Read-Ask-Paraphrase. When students create summaries of their readings, they improve recall of main ideas in the text. (Hagaman, Casey, & Reid, 2010). The student is trained to apply this sequence to each paragraph of an informational passage. (1) The student reads the paragraph with full attention; (2) the student summarizes the paragraph by asking, "What are the main idea and 2 important supporting details?"; and (3) the student paraphrases that paragraph summary in writing. The instructor can collect the student's written paragraph summaries to confirm use of the strategy as well as to monitor the quality of the summaries.

Think-aloud checklists. When students use cognitive strategies in their reading, these mental activities are hidden from observers. To make cognitive-strategy use visible, the teacher can create a checklist outlining the essential steps the student should follow. Next, the student is assigned a reading and prompted to perform a "think-aloud"—



narrating the steps he or she follows as well any problem-solving operations (Fisher & Frey, 2008). The checklist allows the teacher to verify whether the student is applying the correct steps in the proper sequence.

For example, an instructor may teach a student to use this simple set of fix-up strategies whenever encountering unknown words in a passage (McCallum et al., 2010);

- 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).

The teacher also creates a reference checklist with these strategies. Then, if the student stumbles on a word when reading, the instructor can prompt the reader to apply the fix-up skills in a 'think-aloud'—and compare the actual strategy use to the checklist sequence to discover whether the student is able to use the skills correctly and in the proper sequence.

References

Fisher, D. & N. Frey. (2008). *Better learning through structured teaching: A framework for the gradual release of responsibility*. Association for Supervision and Curriculum Development: Alexandria, Virginia.

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

Hosp, M. K., Hosp, J. L., & Howell, K. W. (2007). *The ABC's of CBM: A practical guide to curriculum-based measurement*. New York: Guilford Press.

Howell, K. W., Hosp, J. L., & Kurns, S. (2008). Best practices in curriculum-based evaluation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp.349-362). Bethesda, MD: National Association of School Psychologists.

McCallum, R. S., Krohn, K. R., Skinner, C. H., Hilton-Prillhart, A., Hopkins, M. Waller, S., & Polite, F. (2010). Improving reading comprehension of at-risk high-school students: The art of reading program. *Psychology in the Schools, 48*(1), 78-86.

Sarkisian V., Toscano, M., Tomkins-Tinch, K., & Casey, K. (2003). *Reading strategies and critical thinking*. Retrieved October 15, 2006, from <http://www.academic.marist.edu/alcuin/ssk/stratthink.html>

Weinstein, S. E., & Wu, S. (2009). Readiness assessment tests versus frequent quizzes: Student preferences. *International Journal of Teaching and Learnings in Higher Education, 21*(2), 181-186.



IES Practice Guide (July 2016): K-3: Foundational Skills to Support Reading for Understanding



Recommendation 1. Teach students academic language skills, including the use of inferential and narrative language, and vocabulary knowledge.

1. Engage students in conversations that support the use and comprehension of inferential language.

2. Explicitly engage students in developing narrative language skills.

3. Teach academic vocabulary in the context of other reading activities.

Recommendation 2. Develop awareness of the segments of sounds in speech and how they link to letters.

1. Teach students to recognize and manipulate segments of sound in speech.

2. Teach students letter–sound relations.

3. Use word-building and other activities to link students’ knowledge of letter–sound relationships with phonemic awareness.

Recommendation 3. Teach students to decode words, analyze word parts, and write and recognize words.

1. Teach students to blend letter sounds and sound–spelling patterns from left to right within a word to produce a recognizable pronunciation.



- 2. Instruct students in common sound–spelling patterns.

- 3. Teach students to recognize common word parts.

- 4. Have students read decodable words in isolation and in text.

- 5. Teach regular and irregular high-frequency words so that students can recognize them efficiently.

- 6. Introduce non-decodable words that are essential to the meaning of the text as whole words.

Recommendation 4. Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension.

- 1. As students read orally, model strategies, scaffold, and provide feedback to support accurate and efficient word identification.

- 2. Teach students to self-monitor their understanding of the text and to self-correct word-reading errors.

- 3. Provide opportunities for oral reading practice with feedback to develop fluent and accurate reading with expression.

Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: <http://whatworks.ed.gov>.

Worksheet: Identifying a Student Academic Problem

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

Description of student academic problem(s)

=====

2. **Write a 3-part Problem-Identification Statement.** Use this organizer to rewrite your student's reading problem in the form of a 3-part Problem ID statement. For examples, see pp. 5-6:

3-Part Academic Problem ID Statement

Environmental Conditions or Task Demands	Problem Description	Typical or Expected Level of 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 reading problem. See pp. 6-7 for a listing of possible hypotheses.

Hypothesis Statement