



RTI Classroom Teacher Toolkit

RTI/MTSS for Academics: An Audit

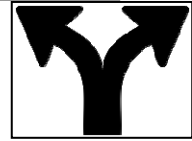
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Workshop Materials: <http://www.interventioncentral.org/nyack>



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.

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



How To: Implement Strong Core Instruction

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

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

1. Increase Access to Instruction	
Instructional Element	Notes
<input type="checkbox"/> Instructional Match. Lesson content is appropriately matched to students' abilities (Burns, VanDerHeyden, & Boice, 2008).	
<input type="checkbox"/> 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).	
<input type="checkbox"/> Preview of Lesson Goal(s). At the start of instruction, the goals of the current day's lesson are shared (Rosenshine, 2008).	
<input type="checkbox"/> Chunking of New Material. The teacher breaks new material into small, manageable increments, 'chunks', or steps (Rosenshine, 2008).	

2. Provided 'Scaffolding' Support	
Instructional Element	Notes
<input type="checkbox"/> 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).	
<input type="checkbox"/> Think-Alouds/Talk-Alouds. When presenting cognitive strategies that cannot be observed directly, the teacher describes those strategies for students. Verbal explanations include 'talk-alouds' (e.g., the teacher describes and explains each step of a cognitive strategy) and 'think-alouds' (e.g., the teacher applies a cognitive strategy to a particular problem or task and verbalizes the steps in applying the strategy) (Burns, VanDerHeyden, & Boice, 2008, Rosenshine, 2008).	
<input type="checkbox"/> 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).	
<input type="checkbox"/> 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.	
<input type="checkbox"/> Collaborative Assignments. Students have frequent opportunities to work collaboratively--in pairs or groups. (Baker, Gersten, & Lee, 2002; Gettinger & Seibert, 2002).	
<input type="checkbox"/> Checks for Understanding. The instructor regularly checks for student understanding by posing frequent questions to the group (Rosenshine, 2008).	



<input type="checkbox"/> 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).	
<input type="checkbox"/> 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).	
<input type="checkbox"/> Brisk Rate of Instruction. The lesson moves at a brisk rate--sufficient to hold student attention (Carnine, 1976; Gettinger & Seibert, 2002).	
<input type="checkbox"/> 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).	

3. Give Timely Performance Feedback

Instructional Element	Notes
<input type="checkbox"/> Regular Feedback. The teacher provides timely and regular performance feedback and corrections throughout the lesson as needed to guide student learning (Burns, VanDerHeyden, & Boice).	
<input type="checkbox"/> Step-by-Step Checklists. For multi-step cognitive strategies, the teacher creates checklists for students to use to self-monitor performance (Rosenshine, 2008).	

4. Provide Opportunities for Review & Practice

Instructional Element	Notes
<input type="checkbox"/> 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).	
<input type="checkbox"/> 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).	
<input type="checkbox"/> 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).	
<input type="checkbox"/> 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).	



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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.

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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: Math Computation Example

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

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

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.
<i>Use math worksheet generator on www.interventioncentral.org to create all time-drill and assessment materials.</i>	<i>Meet with the student at least once before the intervention to familiarize with the time-drill technique and timed math computation assessments.</i>

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: <i>Curriculum-based measurement: math computation assessments: 2 minute single-skill probes</i>		<u>Ideas for Intervention Progress-Monitoring</u> <ul style="list-style-type: none"> Existing data: grades, homework logs, etc. Cumulative mastery log Rubric Curriculum-based measurement Behavior report card Behavior checklist
Baseline	Outcome Goal	
<i>12 correct digits per 2 minute probe</i>	<i>24 correct digits per 2 minute probe</i>	
How often will data be collected? (e.g., daily, every other day, weekly): <i>WEEKLY</i>		

RTI/MTSS in the Classroom: What Are Your Expectations of the Teacher as Academic 'First Responder'?

Listed below are elements of effective classroom academic intervention.

Imagine a teacher who has a student who struggles with grade-level work and needs ongoing instructor support.

Next to each item jot down what you think should be the *minimum* expectation for any teacher to follow in providing that academic 'intervention' support:

Elements of effective classroom intervention	Minimum expectations
1. Describe the student academic problem(s) clearly and specifically	
2. Find/use effective academic-intervention strategies.	
3. Use instructional adjustments/ accommodations as appropriate.	
4. Record (write down) intervention efforts.	
5. Collect data on whether academic performance improves	
6. Communicate with the student.	
7. Communicate with parent(s).	

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 frame student skills in relation to curriculum requirements, describe student academic problems in specific terms, and generate a hypothesis about why the problem is occurring.

1. **Know the Common Core.** Academic abilities can best be described in terms of the specific curriculum skills or knowledge that students are required to demonstrate. The Common Core State Standards for English Language Arts and Mathematics are an excellent starting point. Teachers should have a firm grasp of the Common Core standards for ELA and Math at their instructional grade level. They should also know those standards extending to at least two grades below the current grade to allow them to better match students who are off-level academically to appropriate intervention strategies.
2. **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.* Calculate 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 completing a beginning-level algebra word problem...	...Ann is unable to translate that word problem into an equation with variables...	...while most peers in her class have mastered this skill.
During social studies large-group instruction...	...Franklin attends to instruction an average of 45% of the time...	... while peers in the same room attend to instruction an average of 85% of the time.

For science homework...	... Tye turns in assignments an average of 50% of the time...	... while the classroom median rate of homework turned in is 90%.
On weekly 30-minute in-class writing assignments...	... Angela produces compositions that average 145 words...	...while a sampling of peer compositions shows that the typical student writes an average of 254 words.

3. Develop a hypothesis statement 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 it has been developed, the hypothesis statement 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 more than one hypothesis may apply to a particular student (e.g., a student may have both a skill deficit and a motivation deficit).

Academic Problems: Possible Hypotheses & Recommendations	
Hypothesis	Recommendation
<ul style="list-style-type: none"> • <i>Skill Deficit.</i> The student has not yet acquired the skill. 	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 basic skill 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 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.</i> The student can do the skill but engages in it only for brief periods. 	Consider these ideas to boost endurance: <ul style="list-style-type: none"> • 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 basic skill but fails to use it across appropriate situations or settings. 	Train the student to identify the relevant characteristics of situations or settings when the skill should be used. Provide incentives for the student to use the skill in the appropriate settings.
<ul style="list-style-type: none"> • <i>Motivation (Performance) Deficit.</i> The student is capable of performing the skill and can identify when use of the skill is appropriate—but nonetheless is not motivated to use the skill. 	Use various strategies to engage the student in the skill (e.g., select high-interest learning activities; offer incentives to the student for successful use of the skill, etc.).

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How To: Improve Academic Interventions: 7 Big Ideas

When a teacher observes that a student lacks academic skills needed to attain the Common Core Standards, that instructor must take on the role of intervention 'first responder'. This role implies that the instructor has the tools and know-how to assemble for that student an academic intervention plan designed to repair areas of skill deficit or underperformance. Of course, educators have always attempted to provide struggling students in their classrooms with additional, individualized support; that is the paradigm of good teaching. Research findings, however, have the potential to help teachers to strengthen their effectiveness as interventionists for individual students even as they continue to deliver high-quality core instruction to the entire classroom.

Here are 7 'big ideas' about academic interventions that can help teachers to be successful as classroom first-responders:

1. *Academic problems should be clearly defined.* Before a teacher can select interventions to address a student academic problem, the instructor must be able to describe in clear and specific terms just what the student problem is. In fact, the most important step in the entire process of developing an intervention is to be able to describe correctly and specifically the problem that must be fixed (Bergan, 1995).
2. *Academic problems should be linked to their probable cause.* Once an academic problem has been defined, the teacher will want to develop a hypothesis ('educated guess') about what issue is causing that problem. For example, a student may do poorly on a reading comprehension task because she lacks the necessary comprehension skills, is accurate but not yet fluent in those skills, had once learned those skills but failed to retain them, can perform the skills but has limited endurance, or possesses the skills but does not recognize situations when she should use them (Martens & Witt, 2004). Each of these hypotheses for the student's poor reading comprehension performance suggests different intervention solutions.
3. *Intervention strategies should be research-based.* When possible, the teacher should include in an intervention plan only those ideas supported by research. At present, there is little consensus on how to define 'research-based' interventions (Odom et al., 2005). At the very minimum, however, an intervention idea should be demonstrated to be effective in at least one study published in a reputable peer-reviewed research journal before it is considered for use in school intervention plans.
4. *Intervention plans should help students to access instruction--but not 'dumb down' instruction.* When putting together classroom intervention plans, instructors can choose from among a wide array of strategies to help the student to achieve academic success. But teachers should take care not cross the line and modify core instruction for struggling general-education students; that is, they should not hold underperforming students to a lesser academic standard than their classmates (Tindal & Fuchs, 1999). After all, it is illogical to expect that a student who already evidences a significant academic gap can accelerate learning can close that gap as a consequence of being expected to do less than peers.
5. *Interventions should be documented in writing.* When a teacher commits to develop an academic intervention to support a student, that instructor should always create a written plan to document the intervention prior to implementing it (Burns & Gibbons, 2008). A busy educator can be forgiven for viewing the requirement to write out intervention plans as meaningless paperwork. But there are actually compelling reasons for teachers to put commit plans to paper before starting interventions. First, people have only a limited capacity to juggle details in their head. In a famous and ground-breaking article, for example, Miller (1956) cited a number of psychological

studies demonstrating that the average person is able to actively manage only about 7 discrete bits of information at one time--which explains why local phone numbers in the United States are 7 digits long. A teacher who is running a whole classroom while trying to informally manage even 1 or 2 individual student interventions in their heads must manage far more than 7 information-bits--and is thus likely to overlook important details about instruction or intervention simply because of cognitive overload. When that same teacher is able to rely as needed on written intervention plans as a memory aid, however, she or he can manage the complexity with relative ease. A second reason that teachers should put intervention plans in writing is so that they can produce those plans when needed as proof that they are providing at-risk students with ongoing assistance. In this age of increased teacher accountability, the instructor who documents intervention efforts for marginal students is the one who will receive full credit for that intervention work.

6. *Interventions should be carried out with integrity.* If a student does not improve when given a classroom intervention, there are two possible explanations for this failure to respond: (1) the intervention plan was well-selected, well-constructed and carefully implemented but the student simply failed to make progress, or (2) some aspect of the plan was not carried out as designed, thus compromising the integrity of the intervention. Interventions can unravel for many reasons: e.g., change of school schedule, teacher or student illness, weather-related school cancellations, a misunderstanding on the part of the interventionist about how to implement an intervention strategy, etc. The teacher should monitor the integrity of any classroom intervention closely, ensuring that the actual intervention conforms as closely as possible to the guidelines contained in the written intervention plan (Gansle & Noell, 2007) and taking steps when needed to bring the intervention back into alignment with good practices.
7. *Goal-setting and progress-monitoring should be a part of all academic interventions.* At their core, academic interventions are intended to improve student performance (Duhon, Mesmer, Atkins, Greguson, & Olinger, 2009). But teachers cannot know with certainty whether a student is actually benefiting from an intervention unless they set specific outcome goals up front and then collect data periodically throughout the intervention to verify that these goals are met (Wright 2007).

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Classroom Data Tools: What Are They and What Can They Measure?

When a teacher wants to monitor a student's progress on a classroom academic intervention, the instructor will (1) decide what data 'channel' to use to collect that data, and then (2) select a data tool designed to capture the desired information. Here are those steps:

Step 1: Select a Data 'Channel'. While there are many ways to collect data to monitor student academic performance, virtually all information is gathered through one of four general 'data channels': direct observation, interviews, work products, or self-monitoring.

- *Direct observation.* The evaluator watches the student engaged in the academic task and records significant behaviors observed during that observation.
- *Interviews.* The evaluator talks with the student and/or adults familiar with the student to collect useful information about the student's academic performance.
- *Work products.* The evaluator reviews completed student work (e.g., in-class or homework assignments, quizzes and tests, etc.) to draw conclusions about that student's academic performance.
- *Self-monitoring.* The student collects information about his or her own academic performance and shares that data with the evaluator.

The four channels described here give teachers access to vital information on student performance. However, it is likely that the data the teacher collects across multiple situations will be highly variable and subjective—unless that instructor makes an effort to collect information in a structured, consistent format over time.

For example, a teacher might *observe* a student weekly during independent work to monitor whether the learner is consistently applying all steps of an academic strategy. If the teacher simply jots down random notes during these observations, the information collected will probably vary considerably across time, depending on what the teacher decides to include in his notes on any given day. If instead, however, the teacher uses a checklist that includes the essential steps in the academic strategy, that instructor's observations are far more likely to record accurately and consistently what steps in the strategy the student actually uses.

Checklists, rubrics, and other tools can transform information collected via observation, interviews, work products, or self-monitoring into objective formative data that can be charted over time to track the outcomes of classroom interventions.

Step 2: Select a Data Tool. Teachers have a variety of tools that they can access to collect behavioral or academic information and monitor classroom interventions. This 'look-up' chart provides a review of the most common data sources and what they can measure:

Data Tool	What It Is	What It Can Measure
Archival Data	Existing data routinely collected by schools that provides useful ongoing information about the student's academic or behavioral performance.	<ul style="list-style-type: none"> • Attendance • Office disciplinary referrals • Other aspects of behavior or academic performance captured in the school database



Behavior Report Cards	A teacher-created rating scale that measures student classroom behaviors. A behavior report card contains 3-4 rating items describing goal behaviors. Each item includes an appropriate rating scale (e.g., Poor-Fair-Good). At the end of an observation period, the rater fills out the report card as a summary snapshot of the student's behavior.	<ul style="list-style-type: none"> • General behaviors (e.g., complies with teacher requests; waits to be called on before responding) • Academic 'enabling' behaviors (e.g., has all necessary work materials; writes down homework assignment correctly and completely, etc.)
Checklists	The dividing of a larger behavioral task or sequence into constituent steps, sub-skills, or components. Each checklist element is defined in a manner that allows the observer to make a clear judgment (e.g., YES/NO, COMPLETED/NOT COMPLETED) about whether the student is displaying it.	<ul style="list-style-type: none"> • Step-by-step cognitive strategies • Behavioral routines • Generalization: Target behavior carried out across settings
Cumulative Mastery Records	A cumulative record of the student's acquisition/mastery of a defined collection of academic items such as multiplication math facts. This record is updated after every intervention session.	<ul style="list-style-type: none"> • Any discrete collection of academic items to be mastered: e.g., vocabulary, math facts, spelling words, letter or number names
Curriculum-Based Measures/ Assessment	A series of brief measures of basic academic skills given under timed conditions and scored using standardized procedures. CBM/CBA measures often include research-derived benchmark norms to assist in evaluating the student's performance.	<ul style="list-style-type: none"> • Speed and accuracy in basic academic skills: e.g., letter naming, number naming, number sense, vocabulary, oral reading fluency, reading comprehension (maze), production of writing, math fact computation
Grades	Represent in letter or number form the teacher's formal, summary evaluation of the student's academic performance on an assignment, quiz, test, or longer span of evaluation.	<ul style="list-style-type: none"> • Homework grades • Test grades • Quarterly report card grades
Logs	Written adult or student entries that track the frequency (and additional relevant details) of relevant academic performance and/or behaviors.	<ul style="list-style-type: none"> • Homework completion • Incidents of non-compliance • Student record of dates when he or she uses a self-guided academic intervention. • Listing of student-teacher meetings.
Rubrics	An instrument designed to measure a student on complex tasks. In a rubric, the teacher defines the categories that make up the important dimensions of a task, develops written exemplars representing mastery for each dimension, and creates a rating scale to be used in evaluating a particular student's work for each dimension.	<ul style="list-style-type: none"> • Any complex, multi-dimensional task: e.g., participation in a discussion; writing a research paper; preparing and presenting a PowerPoint; completing and documenting a science lab project, etc.
Work Products	Student work that reflects performance on a series of similar in-class or homework	<ul style="list-style-type: none"> • Work completion • Work accuracy



	assignments (e.g., successive writing assignments or ongoing math homework). A work product is selected because it can reflect growth in the intervention target skill(s). The element(s) of the work product being tracked can be objectively measures and converted to numeric data (e.g., percentage of problems completed).	<ul style="list-style-type: none">• Written evidence of problem-solving steps• Quality of student work (e.g., on writing assignments)
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Progress-Monitoring Questions: How Do I Measure...?

Before a teacher can select a method to monitor a student intervention, that instructor must first decide what assessment question(s) to answer. This 'look-up' chart lists the most common classroom assessment questions and specific assessments that can answer those questions.

Assessment Questions: How do I measure if the student...	Suggested Methods of Progress-Monitoring
<ul style="list-style-type: none"> is becoming more accurate in an academic skill (goal: accuracy only)? 	<ul style="list-style-type: none"> Cumulative Mastery Record: This approach is suitable when the student is mastering a fixed set of items (e.g., biology vocabulary; multiplication math facts 0-12). Observation/Log: The teacher observes and records instances of successful student performance. Work product: The teacher examines student work and records the number/percentage of items correct.
<ul style="list-style-type: none"> is developing fluency in an academic skill (goal: accuracy plus speed)? 	<ul style="list-style-type: none"> Curriculum-based measures: CBMs are a good choice for rote basic skills such as reading fluency or math fact fluency. Other timed measures: Teachers can create their own timed proficiency assessments--that assess work efficiency by measuring accurate responding within pre-set time limits (e.g., running record).
<ul style="list-style-type: none"> is increasing comprehension of independent reading? 	<ul style="list-style-type: none"> Grades: Assignments or quizzes are structured to assess student comprehension of assigned readings and collected with sufficient frequency to capture evidence of short-term improvements. Work product: Short-answer questions. The teacher prepares questions suitable for assessing student comprehension of the reading (e.g., mix of factual and inferential questions). Question sets can be assigned as homework or included in quizzes. Written-Retell Rubric. The student is assigned to summarize important points of assigned readings ('written retellings'); the teacher uses a rubric to record/evaluate 'key ideas' or concepts included in the retelling.
<ul style="list-style-type: none"> is mastering a multi-step cognitive strategy or behavior routine? 	<ul style="list-style-type: none"> Checklist: The teacher or student uses a checklist to verify steps of the strategy successfully completed. Work product: The student is directed to show work on assignment, e.g., perhaps assisted by visual organizers or other aids highlighting strategy steps. The teacher reviews completed work for evidence of strategy use. Observation/Interview: An adult observes the student during the activity to record (perhaps with the help of a checklist or behavior report card) those steps successfully carried out. The observer may also ask the student to describe the steps being followed.
<ul style="list-style-type: none"> is turning in homework or in-class assignments with greater frequency? 	<ul style="list-style-type: none"> Log: The teacher keeps a record of homework turned in.

	<ul style="list-style-type: none"> • Self-Monitoring: The student completes a daily classwork-readiness checklist that includes an item on whether homework was submitted.
<ul style="list-style-type: none"> • produces work of higher quality? 	<ul style="list-style-type: none"> • Rubric: The teacher or student rates the quality of the work. • Checklist: The teacher or student rates whether each element or step in the assignment is complete. • Work product: The teacher defines what element(s) are missing or substandard in student work, monitor their inclusion and/or and quality over time.
<ul style="list-style-type: none"> • is increasing on-task behavior and academic engagement? 	<ul style="list-style-type: none"> • Behavior report card: Rating items are specific to on-task behavior and work engagement. • Work product: Monitor amount/quality/accuracy of completed student in-class work. Improvements in work production correlate with increased on-task behavior.
<ul style="list-style-type: none"> • is better able to organize and implement steps necessary to complete an in-class or homework assignment? 	<ul style="list-style-type: none"> • Checklist: Recommended if assignment steps can be rated simply COMPLETED/NOT COMPLETED. • Rubric: Recommended if assignment steps are more complex and rated along a quality continuum.
<ul style="list-style-type: none"> • transfers an existing skill or strategy to new settings or situations (goal: generalization)? 	<ul style="list-style-type: none"> • Observer/Checklist: The observer notes whether the student follows the steps of the checklist in the appropriate situations or settings. • Interview/Checklist: Student is asked structured set of questions about successful use of the target skill/strategy in the target setting(s).
<ul style="list-style-type: none"> • improves compliance with behavioral expectations? 	<ul style="list-style-type: none"> • Behavior report card: Rating items track compliance. • Logs: The teacher keeps a log recording incidents of misbehavior, etc. • Archival records: Office Disciplinary Referrals are tracked for incidents of non-compliance.
<ul style="list-style-type: none"> • improves overall academic standing in the course because of academic interventions? 	<ul style="list-style-type: none"> • Grades. Grades are designed to reflect general improvements in academic performance. Ideally, grading opportunities are frequent and the grades used to evaluate academic improvement are a 'pure' measure of academic attainment.

RTI/MTSS for Academics: District-Wide Planning Tool: 'Next Steps' Activity

Directions: Create a plan listing the key next steps that your school or district should take between now and June 2021 to advance the RTI/MTSS model for academics. Be prepared to report out.

	Goal Number(s) from Planning Tool/ Description of Task	Person(s) Responsible	Proposed Completion Date	Additional Resources Needed
E x a m p l e	[A.1.5] created a bank of academic intervention ideas accessible by all staff.	Reading Teachers; School Psychologist, MS Counselor	March 2020	Half-Day during Supt Conf Day in March for staff Follow-up training with grade level teams
1				
2				
3				
4				
5				