

RTI Toolkit: A Practical Guide for Schools

Building an RTI/MTSS System for Mental-Health: Guidance for School Teams

# **SESSION 3: Follow the Data**

Jim Wright, Presenter

14 March 2019 Eastern Suffolk BOCES 15 Andrea Road Holbrook, NY

Email: jim@jimwrightonline.com Workshop Downloads at: http://www.interventioncentral.org/MTSS\_behavior

## How to Monitor Student Progress on Tier 1/Classroom Interventions

If you are a teacher who wants to put a classroom academic or behavioral intervention plan in place for a struggling student, you will want to collect data on that intervention so that you can judge its effectiveness. After all, no one wants to commit time and effort to an intervention that is ineffective.

Your goal of interventions in Tier 1 (general-education instructional settings) is to provide academic and/or behavioral support that will allow your target student to be successful in core instruction. The kinds of data that you choose to monitor that student's progress will, of course, depend on what you wish to measure. However, any assessment that you choose should be a valid measure of the behavior or academic skill that is the focus of the intervention, able to accurately record short-term student gains, and feasible to collect in a busy classroom.

This article walks you through a 7-step process to create and carry out a plan to monitor student progress for any teacher-created classroom intervention:

**STEP 1: What is the skill or behavior that you are measuring?** The initial step in setting up your plan to monitor a student is to choose a specific skill or behavior to measure. This 'problem-identification' statement should define the skill or behavior in clear, specific terms. Here are some examples:

### Problem-Identification Statements: Examples

HOMEWORK. Russell does not turn in homework.

WRITING. Andrea's writing includes many incomplete sentences.

MATH FACTS. Rick is not fluent in multiplication math facts.

BEHAVIOR. Angela is inattentive in large-group instruction.

STEP 2: What data-collection method will best measure your target skill or behavior? Your next objective is to select a valid, reliable, and manageable way to collect data on the skill or behavior that you have targeted for intervention. You have a range of data-collection tools to choose from, such as rubrics, checklists, Daily Behavior Report Cards (DBRC), Curriculum-Based Measures (CBMs), teacher logs, etc. Here are examples of data collection methods selected to match specific student problems:

Data Collection Methods: Examples	
Problem ID Statement	Sample Data Tool
HOMEWORK. Russell does not turn in homework.	Homework log
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.
MATH FACTS. Rick is not fluent in multiplication math facts.	Curriculum-based measurement: 2-minute math computation worksheets in 0-12 multiplication
BEHAVIOR. Angela is inattentive in large-group instruction.	Daily Behavior Report Card

NOTE: For a more complete review of tools for data collection, see the article *Classroom Data Tools: What Are They and What Can They Measure?* appearing elsewhere in this document.

**STEP 3: How long will your intervention last?** When planning your classroom intervention, you should determine an end-date when you can review your progress-monitoring data and decide whether the intervention is successful. A good practice is to run your intervention for at least 6-8 instructional weeks before evaluating its effectiveness. Student data can vary significantly from day to day: allowing 6-8 weeks for data collection permits you to collect sufficient data points to have greater confidence when judging the intervention's impact.

STEP 4: What is the student's baseline performance? Before launching your intervention, you will first use your selected data-collection tool to record baseline data reflecting the student's current performance in the skill or behavior that you are measuring. Baseline data represents a starting point that permits you to calculate precisely any progress the student makes during the intervention. Because student data can be variable, however, you should strive whenever possible to collect at least 3 baseline data points before starting your intervention. Here are examples of baseline data:

Baseline Data: Examples							
Problem ID Statement	Sample Data Tool	Baseline Data					
HOMEWORK. Russell does not turn in homework.	Homework log	Russell turned in homework on 20 percent of days when homework was assigned. [Data source: percentage homework completion calculated from 1 week of homework log entries.]					
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.	On Andrea's writing samples, an average of 40 percent of sentences are found to be incomplete. [Data source: median value of 3 writing samples collected on different days]					
MATH FACTS. Rick is not fluent in multiplication math facts.	Curriculum-based measurement: 2-minute math computation worksheets	Rick calculates an average of 29 correct digits in 2 minutes on a 0-12 multiplication math-fact worksheet. [Data source: median value of 3 CBM worksheets collected on different days.]					
BEHAVIOR. Angela is inattentive in large-group instruction.	Daily Behavior Report Card	On a DBRC item <i>"The student requires no more than 1 redirect for inattention during the class period",</i> the teacher rates this item 'YES' during 1 of 5 days (20 percent). [Data source: percentage calculated from 5 days of DBRC data collection.]					

**STEP 5: What is the student's outcome goal?** You will next set an outcome goal that describes how the student is expected to perform on the target skill or behavior if the intervention is successful (e.g., after 6-8 weeks). Setting a specific outcome goal for the student is a critical step, as it allows you to judge the intervention's effectiveness.

Here are examples of outcome goals:

**Outcome Goal: Examples** 

How to Monitor Tier 1/Classroom Interventions © 2018 Jim Wright

4

Problem ID Statement	Sample Data Tool	Outcome Goal
HOMEWORK. Russell does not turn in homework.	Homework log	Russell will turn in at least 80 percent of assigned homework. [Data source: percentage homework completion calculated from final week of homework log entries.]
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.	On Andrea's writing samples, at least 90 percent of attempted sentences will be correct and complete. [Data source: median value of final 3 writing samples]
MATH FACTS. Rick is not fluent in multiplication math facts.	Curriculum-based measurement: 2-minute math computation worksheets	Rick will calculate an average of 49 correct digits in 2 minutes on a 0-12 multiplication math-fact worksheet. [Data source: average of final 2 CBM worksheets.]
BEHAVIOR. Angela is inattentive in large-group instruction.	Daily Behavior Report Card	On a DBRC item <i>"The student requires no more than 1 redirect for inattention during the class period"</i> , the teacher will rate this item 'YES' during at least 4 of 5 days (80 percent). [Data source: percentage calculated from final 5 days of DBRC data collection.]

You can use several sources to calculate an outcome goal:

- *CBMs.* If you are using academic CBMs with benchmark norms, those grade-level norms can help you to set a goal for the student.
- Classroom Norms. If you are measuring a skill for which you lack benchmark norms, you may instead be able to compile classroom norms (i.e.., sampling your entire class or a subgroup of your class) and use those group norms to set an outcome goal. For example, a teacher with a student who frequently writes incomplete sentences might collect writing samples from a small group of 'typical' student writers in the class, analyze those samples to calculate percentage of complete sentences, and use this peer norm (e.g., 90 percent complete sentences) to set a sentence-writing outcome goal for that struggling writer.
- Teacher-Defined Performance Goal (Criterion Mastery). Sometimes, you must write an outcome goal—but will
  have access to neither benchmark norms nor classroom norms for the skill or behavior you are trying to
  measure.

In this case, you can always rely on your own judgment to define a meaningful outcome goal. For example, a math instructor wishes to teach a student to follow a 7-step procedural checklist when solving math word problems. The data source in this example is a checklist, and the teacher sets as the outcome goal that—when given a word problem—the student will independently follow all steps in the teacher-supplied checklist in the correct order.

TIP: For a student with a large academic deficit, you very likely will not be able to close that skill-gap entirely within one 6-8-week intervention cycle. In this instance, you should instead set an ambitious 'intermediate goal' that, if accomplished, will demonstrate that your student is clearly closing the academic gap with peers. It is not unusual for

students with substantial academic delays to require several successive intervention-cycles with intermediate goals before they are able to close the skill-gap sufficiently to bring them up their grade-level peers.

**STEP 6: How often will you collect data?** The more frequently you collect data, the more quickly you will be able to judge whether an intervention is effective (Filderman & Toste, 2018). This is because more data points make trends of improvement easier to spot and increase your confidence in the pattern that the data is showing you. Ideally, you should collect data at least weekly for the duration of the intervention period. If that is not feasible, you will want monitor student progress no less than twice per month.

**STEP 7: How does the student's actual performance compare with the outcome goal?** Once you have created your progress-monitoring plan for the student, you will put that plan into action. At the end of the pre-determined intervention period (e.g., in 6 weeks), you will review the student's cumulative progress-monitoring data, compare it to the outcome goal, and judge the effectiveness of the intervention. Here are your decision rules:

- *Outcome goal met.* If your student meets the outcome goal, you will judge the intervention a success. You may decide that the intervention is no longer necessary and discontinue. Or you may choose to continue the present intervention for an additional period because the student still appears to benefit from it.
- Clear progress but outcome goal not met. If your student fails to meet the outcome goal, but you see clear signs that the student is making progress, you might decide that the intervention shows promise. In this case, your next step would be to change the existing intervention in some way(s) to intensify its effect. For example, you could meet more frequently with the student, meet for longer sessions, shrink the group size (if the intervention is group-based), etc.
- *Little or no progress observed.* If your student fails to make meaningful progress on the intervention, your logical next step will be to replace the current intervention plan with a new strategy.

### References

Filderman, M. J., & Toste, J. R. (2018). Decisions, decisions, decisions: Using data to make instructional decisions for struggling readers. *Teaching Exceptional Children, 50*(3), 130-140.

6

# 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> <li>Attendance</li> <li>Office disciplinary referrals</li> <li>Other aspects of behavior or academic performance captured in the school database</li> </ul>	

		'y'''	
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.	•	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.	•	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.	•	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.	•	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.	•	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.	•	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	•	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	Student work that reflects performance on a	•	Work completion

**%** www.interventioncentral.org

0°	Data Collection: How to Monitor Classroom Interventions © 2018 Jim Wri	ght
	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> <li>Written evidence of problem- solving steps</li> <li>Quality of student work (e.g., on writing assignments)</li> </ul>

## 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	Suggested Methods of Progress-Monitoring
<ul> <li>is becoming more accurate in an academic skill (goal: accuracy only)?</li> </ul>	<ul> <li>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).</li> <li>Observation/Log: The teacher observes and records instances of successful student performance.</li> <li>Work product: The teacher examines student work and records the number/percentage of items correct.</li> </ul>
<ul> <li>is developing fluency in an academic skill (goal: accuracy plus speed)?</li> </ul>	<ul> <li>Curriculum-based measures: CBMs are a good choice for rote basic skills such as reading fluency, or math fact fluency.</li> <li>Other timed measures: Teachers can create their own timed proficiency assessmentsthat assess work efficiency by measuring accurate responding within pre-set time limits (e.g., running record).</li> </ul>
is increasing comprehension of independent reading?	<ul> <li>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.</li> <li>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.</li> <li>Work product: Written retelling. The student is assigned to summarize important points of assigned readings ('written retellings'); the teacher tabulates the number/percentage of 'key ideas' or concepts included in the retelling.</li> </ul>
<ul> <li>is mastering a multi-step cognitive strategy or behavior routine?</li> </ul>	<ul> <li>Checklist: The teacher or student uses a checklist to verify steps of the strategy successfully completed.</li> <li>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.</li> <li>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.</li> </ul>
• is turning in homework or in- class assignments with greater frequency?	Log: The teacher keeps a record of homework turned in.

-		
		<ul> <li>Self-Monitoring: The student completes a daily classwork- readiness checklist that includes an item on whether homework was submitted.</li> </ul>
•	produces work of higher quality?	<ul> <li>Rubric: The teacher or student rates the quality of the work.</li> <li>Checklist: The teacher or student rates whether each element or step in the assignment is complete.</li> <li>Work product: The teacher defines what element(s) are missing or substandard in student work, monitor their inclusion and/or quality over time.</li> </ul>
•	is increasing on-task behavior and academic engagement?	<ul> <li>Behavior report card: Rating items are specific to on-task behavior and work engagement.</li> <li>Work product: Monitor amount/quality/accuracy of completed student in-class work. Improvements in work production correlate with increased on-task behavior.</li> </ul>
•	is better able to organize and implement steps necessary to complete an in-class or homework assignment?	<ul> <li>Checklist: Recommended if assignment steps can be rated simply COMPLETED/NOT COMPLETED.</li> <li>Rubric: Recommended if assignment steps are complex and rated along a quality continuum.</li> </ul>
•	transfers an existing skill or strategy to new settings or situations (goal: generalization)?	<ul> <li>Observer/Checklist. The observer notes whether the student follows the steps of the checklist in the appropriate situations or settings.</li> <li>Interview/Checklist: Student is asked structured set of questions about successful use of the target skill/strategy in the target setting(s).</li> </ul>
•	improves compliance with behavioral expectations?	<ul> <li>Behavior report card: Rating items track compliance.</li> <li>Logs: The teacher keeps a log recording incidents of misbehavior, etc.</li> <li>Archival records: Office Disciplinary Referrals are tracked for incidents of non-compliance.</li> </ul>
•	improves overall academic standing in the course because of academic interventions?	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.

## **Behavioral Assessment Tools**

### The RIOT/ICEL Matrix: Organizing Data to Answer Questions About Student Academic Performance & Behavior

When a student displays serious academic or behavioral deficits, the Response to Intervention model adopts an inductive approach that begins with educators collecting a range of information to better analyze and understand the student's intervention needs (Fuchs, Fuchs & Compton, 2010).

However, this investigative RTI problem-solving approach can be compromised at the outset in several ways (Hosp, 2008). For example, educators may draw from too few sources when pulling together information about the presenting problem(s)—e.g., relying primarily on interviews with one classroom teacher -- which can bias the findings. Also, educators may not consider the full range of possible explanations for the student's academic or behavioral problems—such as instructional factors or skill-deficits—and thus fail to collect information that would confirm or rule out those competing hypotheses. And finally, educators may simply not realize when they have reached the 'saturation point' in data collection (Hosp, 2008) when stockpiling still more data will not significantly improve the understanding of the student problem.

One tool that can assist schools in their quest to sample information from a broad range of sources and to investigate all likely explanations for student academic or behavioral problems is the RIOT/ICEL matrix. This matrix helps schools to work efficiently and quickly to decide what relevant information to collect on student academic performance and behavior—and also how to organize that information to identify probable reasons why the student is not experiencing academic or behavioral success.

The RIOT/ICEL matrix is not itself a data collection instrument. Instead, it is an organizing framework, or heuristic, that increases schools' confidence both in the quality of the data that they collect and the findings that emerge from the data (Hosp, 2006, May). The top horizontal row of the RIOT/ICEL table includes four potential sources of student information: Review, Interview, Observation, and Test (RIOT). Schools should attempt to collect information from a range of sources to control for potential bias from any one source.

The leftmost vertical column of the RIO/ICEL table includes four key domains of learning to be assessed: Instruction, Curriculum, Environment, and Learner (ICEL). A common mistake that schools often make is to assume that student learning problems exist primarily in the learner and to underestimate the degree to which teacher instructional strategies, curriculum demands, and environmental influences impact the learner's academic performance. The ICEL elements ensure that a full range of relevant explanations for student problems are examined.

Select Multiple Sources of Information: RIOT. The elements that make up the top horizontal row of the RIOT/ICEL table (Review, Interview, Observation, and Test) are defined as follows:

• **Review**. This category consists of past or present records collected on the student. Obvious examples include report cards, office disciplinary referral data, state test results, and attendance records. Less obvious examples include student work samples, physical products of teacher interventions (e.g., a sticker chart used to reward positive student behaviors), and

emails sent by a teacher to a parent detailing concerns about a student's study and organizational skills.

- Interview. Interviews can be conducted face-to-face, via telephone, or even through email correspondence. Interviews can also be structured (that is, using a pre-determined series of questions) or follow an open-ended format, with questions guided by information supplied by the respondent. Interview targets can include those teachers, paraprofessionals, administrators, and support staff in the school setting who have worked with or had interactions with the student in the present or past. Prospective interview candidates can also consist of parents and other relatives of the student as well as the student himself or herself.
- Observation. Direct observation of the student's academic skills, study and organizational strategies, degree of attentional focus, and general conduct can be a useful channel of information. Observations can be more structured (e.g., tallying the frequency of call-outs or calculating the percentage of on-task intervals during a class period) or less structured (e.g., observing a student and writing a running narrative of the observed events). Obvious examples of observation include a teacher keeping a frequency count of the times that she redirects an inattentive student to task during a class period and a school psychologist observing the number of intervals that a student talks with peers during independent seatwork. Less obvious examples of observation include having a student periodically rate her own academic engagement on a 3-point scale (self-evaluation) and encouraging a parent to send to school narrative observations of her son's typical routine for completing homework.
- Test. Testing can be thought of as a structured and standardized observation of the student that is intended to test certain hypotheses about why the student might be struggling and what school supports would logically benefit the student (Christ, 2008). Obvious examples of testing include a curriculum-based measurement Oral Reading Fluency probe administered to determine a student's accuracy and fluency when reading grade-level texts and a state English Language Arts test that evaluates students' mastery of state literacy standards. A less obvious example of testing might be a teacher who teases out information about the student's skills and motivation on an academic task by having that student complete two equivalent timed worksheets under identical conditions—except that the student is offered an incentive for improved performance on the second worksheet but not on the first ('Can't Do/Won't Do Assessment'). Another less obvious example of testing might be a student pre-tests in her math book, to self-grade the test, and to write down questions and areas of confusion revealed by that test for later review with the math instructor.

**Investigate Multiple Factors Affecting Student Learning: ICEL**. The elements that compose the leftmost vertical column of the RIO/ICEL table (Instruction, Curriculum, Environment, and Learner) are described below:

• Instruction. The purpose of investigating the 'instruction' domain is to uncover any instructional practices that either help the student to learn more effectively or interfere with that student's learning. More obvious instructional questions to investigate would be whether specific teaching strategies for activating prior knowledge better prepare the student to master

new information or whether a student benefits optimally from the large-group lecture format that is often used in a classroom. A less obvious example of an instructional question would be whether a particular student learns better through teacher-delivered or self-directed, computer-administered instruction.

- **Curriculum**. 'Curriculum' represents the full set of academic skills that a student is expected to have mastered in a specific academic area at a given point in time. To adequately evaluate a student's acquisition of academic skills, of course, the educator must (1) know the school's curriculum (and related state academic performance standards), (2) be able to inventory the specific academic skills that the student currently possesses, and then (3) identify gaps between curriculum expectations and actual student skills. (This process of uncovering student academic skill gaps is sometimes referred to as 'instructional' or 'analytic' assessment.) More obvious examples of curriculum questions include checking whether a student knows how to computer a multiplication problem with double-digit terms and regrouping or whether that student knows key facts about the Civil War. A less obvious curriculum-related question might be whether a student possesses the full range of essential academic vocabulary (e.g., terms such as 'hypothesis') required for success in the grade 10 curriculum.
- Environment. The 'environment' includes any factors in students' school, community, or home surroundings that can directly enable their academic success or hinder that success. Obvious questions about environmental factors that impact learning include whether a student's educational performance is better or worse in the presence of certain peers and whether having additional adult supervision during a study hall results in higher student work productivity. Less obvious questions about the learning environment include whether a student has a setting at home that is conducive to completing homework or whether chaotic hallway conditions are delaying that student's transitioning between classes and therefore reducing available learning time.
- Learner. While the student is at the center of any questions of instruction, curriculum, and [learning] environment, the 'learner' domain includes those qualities of the student that represent their unique capacities and traits. More obvious examples of questions that relate to the learner include investigating whether a student has stable and high rates of inattention across different classrooms or evaluating the efficiency of a student's study habits and test-taking skills. A less obvious example of a question that relates to the learner is whether a student harbors a low sense of self-efficacy in mathematics that is interfering with that learner's willingness to put appropriate effort into math courses.

Integrating the RIOT/ICEL Matrix into a Building's Problem-Solving. The power of the RIOT/ICEL matrix lies in its use as a cognitive strategy, one that helps educators to verify that they have asked the right questions and sampled from a sufficiently broad range of data sources to increase the probability that they will correctly understand the student's presenting concern(s). Viewed in this way, the matrix is not a rigid approach but rather serves as a flexible heuristic for exploratory problem-solving.

At the very least, RTI consultants should find that the RIOT/ICEL matrix serves as a helpful mental framework to guide their problem-solving efforts. And as teachers over time become more familiar

with the RTI model, they also might be trained to use the RIOT/ICEL framework as they analyze student problems in their classrooms and prepare Tier 1 interventions.

### References

Christ, T. (2008). Best practices in problem analysis. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 159-176). Bethesda, MD: National Association of School Psychologists.

Fuchs L. S., Fuchs, D., and Compton, D. L. (2010). Rethinking response to intervention at middle and high school. *School Psychology Review*, *39*, 22-28.

Hosp, J. L. (2006, May) Implementing RTI: Assessment practices and response to intervention. NASP Communiqué, 34(7). Retrieved September 8, 2010, from: http://www.nasponline.org/publications/cq/cq347rti.aspx

Hosp, J. L. (2008). Best practices in aligning academic assessment with instruction. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp.363-376). Bethesda, MD: National Association of School Psychologists.

RIOT/ICEL Ma concerned at I probably some	atrix Example: The matrix below is his apparent <i>lack of academic enga</i> ewhat unlikely that all of these source	filled out with some possible sou gement in large-group settings. N ces of information would be collec	rces of information on a student, Rick IOTE: The examples in the matrix are ted for a single student, unless his or	<ul> <li>whose mathematics teacher is</li> <li>for purposes of illustration only. It is</li> <li>her needs were intensive.</li> </ul>
	Review	Interview	Observe	Test
Instruction	<ul> <li>[Review-Instruction] Review of past report cards: The teacher searches for comments from former instructors about instructional techniques to which Rick did or did not respond.</li> </ul>	<ul> <li>[Interview-Instruction] Teacher interview: The instructor is asked by the guidance counselor which instructional elements help Rick to attend in large-group instruction and which are less effective.</li> </ul>	<ul> <li>[Observe-Instruction] Classroom observation: During large-group instruction, an observer calculates Rick's rate of on-task behavior (e.g., through momentary time-sampling).</li> </ul>	<ul> <li>[Test-Instruction] Note-taking conditions: The teacher structures two large-group instruction conditions- -regular note-taking and guided notes         <ul> <li>and observes whether Rick's level of academic engagement improves with guided notes.</li> </ul> </li> </ul>
Curriculum	• [Review-Curriculum] Work products: The teacher collects the student's math homework and examines it for evidence about whether Rick is able correctly to use the algorithms taught in class.	• [Interview-Curriculum] Student interview: The guidance counselor meets with Rick to ask him a series of questions about his math skills.	<ul> <li>[Observe-Curriculum] Classroom observation: The teacher pairs students, directs each to describe to the other his/her reasoning for solving a multi-step word problem with math graphic. Rick is observed during this exercise.</li> </ul>	<ul> <li>[Test-Curriculum] Diagnostic test: The teacher prepares and administers to the class a diagnostic test with problems that test essential foundation math knowledge required for success in the course. Rick's test results are carefully reviewed.</li> </ul>
Environment	• [Review-Environment] Folder review: Rick's cumulative folder is reviewed for past instructor comments about aspects of the instructional environment (e.g., presence or absence of peers, teacher proximity) that helped or hindered academic performance.	<ul> <li>[Interview-Environment] Parent interview: At a parent conference, the teacher asks Rick's father to describe the student's nightly homework routine, as well as those factors in the homework setting that appear to help or hinder Rick's homework completion.</li> </ul>	<ul> <li>[Observe-Environment] Classroom observation: During observations of Rick in a large-group math setting, the observer looks for environmental factors—e.g., presence or absence of peers, teacher proximity) that help or hinder academic performance.</li> </ul>	<ul> <li>[Test-Environment] Peer seating conditions: On different occasions, the instructor (a) allows Rick to choose his own seat-mates and (b) seats Rick next to positive peer role models. The instructor observes whether Rick's level of academic engagement improves in the peer role-model condition.</li> </ul>
Learner	• [Review-Learner] <b>Math journal</b> : The math teacher collects Rick's math journal and reviews the entries for hints about the student's attitude and level of self- confidence toward mathematics [Learner characteristic: math self- efficacy].	• [Interview-Learner] Parent interview: In an email exchange with the student's mother, the teacher asks her what her son's study habits [ Learner characteristic: study & organizational skills]	• [Observe-Learner] <b>Behavior rating</b> <b>based on observation</b> : For one week, the math teacher rates the student daily on a behavior report card. One of the several rating items is the student's 'time on task' [Learner characteristic: attentional focus].	• [Test-Learner] <b>Reward conditions</b> : On different occasions, the teacher (a) has Rick participate in large-group instruction with no reward and (b) offers Rick an incentive (reward) if he requires no more than 1 teacher prompt per session to direct him back to task. The instructor observes whether Rick's engagement increases in the reward condition [Learner characteristic: attentional focus].

### **RIOT/ICEL** Assessment Worksheet

Student: \_\_\_\_\_ Person Completing Worksheet: \_\_\_\_\_

Date: \_\_\_\_\_ Statement of Student Problem: \_\_\_\_\_

Directions: Fill out the grid below to develop an assessment plan for the targeted student.

	Review	Interview	Observe	Test
Instruction				
Curriculum				
Environment				
Learner				

### How to Track Use of Adult Prompts on Academic Tasks

When students acquire new academic skills, they often require a transitional phase of teacher prompts to successfully perform those skills. For example, a student completing a worksheet might initially need one or more of these prompts to start that worksheet:

- 1. Gestural prompt: The teacher points to the sheet as a signal for the student to begin;
- 2. Verbal prompt: The teacher says, "Angela, begin your worksheet.";
- 3. Modeling prompt: The teacher demonstrates the steps to completing the worksheet;
- 4. Manual prompt: The teacher physically guides the student's hand holding the pen to successfully complete an item on the worksheet.

Table 1 defines the types of teacher prompts most frequently used in classrooms. Those prompts are ranked bottomto-top in ascending order of intensity. For example, a verbal prompt is considered to be less intensive than a modeling prompt.

┫	Table 1: Pro	mpt Types (MacDuff et al., 2001)				
	Manual The student is guided manually to complete the skill. Guiding the					
	Prompt	student's hand to write letters on a worksheet is an example of a manual				
		('hand-over-hand') prompt. A partial manual prompt (e.g., the teacher				
	guiding the student manually through only part of the task) is counted a					
	a manual prompt.					
	Modeling	The student views a demonstration of the skill (e.g., demonstrated in				
	Prompt	person or via a video recording). Partial modeling (e.g., the teacher				
		demonstrating a single step of a multi-step task) is counted as a modeling				
		prompt.				
	Verbal	The student is prompted via verbal communication to demonstrate the				
	Prompt	skill. Verbal prompts can consist of a single word or several consecutive				
		sentences. Encouragement and praise whose goal is to get the student to				
		begin the task are considered verbal prompts.				
Gestural The student is prompted via a gesture (e.g., nodding, pointing,						
	Prompt	tapping on a worksheet) to complete the skill.				
	No Prompt	The student requires no prompting to complete the skill.				

Prompts are a valuable tool to transition students to task-independence. However, students can sometimes remain 'stuck' continually, requiring teacher prompts—while failing to master independence in the target skill. In this situation, an appropriate intervention goal would be to systematically fade use of prompts.

This document presents a process and accompanying forms that teachers can use monitor progress toward taskindependence—by tracking the type and number of prompts required for student performance. For example, a teacher has a student, Rodney, who requires significant and consistent prompting before he will start independent work on a multiplication math-fact worksheet. Figure 1, below, displays a completed section of Rodney's *Student Prompts Recording Form.* (A blank version of the form appears later in this document.) The teacher observes Rodney and uses this form to keep a log of the number and kinds of prompts the student requires each session to start his math-fact work.



### Figure 1: Sample Student Prompts Recording Form Entry

the sheetencouraged Rodney to start his workshowed him how to complete a sample problem. Then he starte	1		DATE	: M <b>()</b> W Th	FO	<u>ct 22, 2018</u>	NOTES: [	Rodney hesitate	ed in sta	arting his math wo	orksheet. I pointed to
No Prompt 1 Gestural <b>7</b> Verbal <b>1</b> Modeling Manu		th	ne sheet	tencourage	ed Rodn	ey to start his	workshov	ved him how to	comple	ete a sample prob	lem. Then he started.
		Γ	No	o Prompt	1	Gestural	2	Verbal	1	Modeling	Manual

Jim Wright, Presenter

As Figure 1 shows, the teacher moves through a sequence of less-intensive to more-intensive prompts, until finding success with a modeling prompt. The instructor records comments to describe the prompting sequence that she uses. Just as importantly, the teacher tabulates the number of attempts she makes with each prompt type. For example, this instructor attempts 2 verbal prompts before resorting to a modeling prompt. This frequency data can be charted over time as a way to measure progress in fading teacher prompts.

Figure 2 displays an excerpt from the *Student Prompts Progress-Monitoring Chart*, a blank version of which appears later in this write-up. This chart allows teachers to summarize prompting data across multiple days to look for possible trends of improvement. In this example, the teacher has charted a week's worth of data on her use of prompts with Rodney.





A look at the chart shows clear progress in fading use of prompts. By day 2, verbal prompts replace modeling; by day 4, a simple pointing (gestural) prompt is sufficient for Rodney to begin his math-fact worksheet; by day 5, Rodney initiates his independent work without needing any teacher prompts.

**Reference:** MacDuff, G. S., Krantz, P. J., & McClannahan, L. E. (2001). Prompts and prompt-fading strategies for people with autism. In C. Maurice, G. Green, & R. M. Foxx (Eds.), *Making a difference: Behavioral intervention for autism* (pp. 37-50). Austin, TX, US: PRO-ED.

www.interventioncentral.org

### Student Prompts Recording Form

Student: \_\_\_\_\_ Teacher: \_\_\_\_\_

Target Task/Behavior. Describe the task/behavior that you are targeting to reduce/eliminate task-initiation prompts.

Prompt Definitions. Use these definitions to classify the types of prompts you use with your student.

f	Prompt Types. (MacDuff et al., 2001)						
Manual The student is guided manually to complete the skill.							
	Modeling The student views a demonstration of the skill (e.g., demonstrated in person, via a video recording).						
Verbal The student is prompted via verbal communication to demonstrate the skill.							
Gestural The student is prompted via a gesture (e.g., nodding, pointing, motioning, tapping on a worksheet) to							
No Prompt The student requires no prompting to complete the skill.							

Prompt Recording. In the sections below, record your use of task-initiation prompts to initiate the identified task/behavior. Write observation dates, number and type of prompts used, and notes explaining your prompt use.

1	DATE: M T W Th F	NOTES:			
	No Prompt	Gestural	Verbal	Modeling	Manual
2	DATE: M T W Th F	NOTES:			
[	No Prompt	Gestural	Verbal	Modeling	Manual
3	DATE: M T W Th F	NOTES:			
[	No Prompt	Gestural	Verbal	Modeling	Manual
4	DATE: M T W Th F	NOTES:			
[	No Prompt	Gestural	Verbal	Modeling	Manual
5	DATE: M T W Th F	NOTES:			
[	No Prompt	Gestural	Verbal	Modeling	Manual

*www.interventioncentral.org* 

### Student Prompts Progress-Monitoring Chart

Date

Student: \_

Teacher: \_

Directions. Use this chart to record/summarize entries from the Student Prompts Recording Form.

## Prompt Chart: Series/Week Manual Modeling Verbal Gestural No Prompt Date Date Date Date Date Prompt Chart: Series/Week Manual Modeling Verbal Gestural No Prompt



Date

Date

Date

Date

## Teaching Positive Behaviors: The Power of Checklists

Educators frequently need to define positive student behaviors so that they can teach the student to perform them; take data on them; communicate with others about them; and/or encourage the student to monitor them.

Making Behavior Checklists. One useful way to define a goal behavior is to break it down into a series of steps in checklist format. The process of breaking down a larger behavior goal ('task') into individual steps is called a 'task analysis'.

Creating a behavior checklist is straight-forward. Often, you can just analyze the larger task and use common sense to break it down into smaller steps. Sometimes it is also helpful to get the advice of an expert as you prepare your behavior checklist. For example, if you want to create a checklist that a student will follow to solve a math word problem, you might ask the math teacher for guidance in constructing the steps. Or, if you are developing a checklist to train a student to wash her hands, you might consult the school nurse for expert advice on the sequence of steps to include.

The sample tasks analysis below shows how the behavior goal ("The student is ready to learn at the start of class") can be converted into more specific steps that can be taught, observed, and measured.

# Behavior Checklist Example: The student is ready to learn at the start of class.

At the start of class, the student:
has a sharpened pencil.
has paper for taking notes.
has cleared his/her desk of unneeded materials.
has homework ready to turn in.
has put his/her cellphone in backpack.
is sitting quietly.

□ is working on the start-of-class assignment.

**Teaching Positive Behaviors Using Checklists.** Positive behaviors must be taught. This direct-instruction sequence can help your students to both correctly master and actually engage in expected behaviors. This framework includes four major stages:

1. **Show Them.** Using your behavior checklist as a guide, you explain and explicitly model expected ("target") behaviors.

- 2. Watch and Praise Them. Students practice target behaviors under your supervision--and you give frequent corrective feedback and praise.
- 3. **Practice**, **Practice**, **Practice**. Students engage in behaviors independently with your encouragement and reinforcement.
- 4. **Prompt Behaviors Across Settings.** With your prompting and feedback, students are able to display target behaviors appropriately across a variety of settings or situations ("generalization").

**Making Behavior Checklists**. You can use a free web-based app, the Self-Check Behavior Checklist Maker, to create customized behavior checklists. This app is available at:

http://www.interventioncentral.org/tools/self-check-behavior-checklist-maker

#### Reference

Kazdin, A. E. (2013). Behavior modification in applied settings (7th ed.). Long Grove, IL: Waveland Press, Inc.

### RTI Daily Behavior Report: Guidelines for Use

The RTI Daily Behavior Report (RTI-DBR) is a brief form that educators can use to rate student classroom conduct and work-related behaviors on a daily basis.

Daily Behavior Reports in general have several advantages that make them idea for use in monitoring student interventions (Chafouleas, Riley-Tillman, & Sugai, 2007): They are familiar and acceptable to most school staff, are a convenient assessment tool for busy teachers, and can be used both to better understand students' behavioral needs and to track student progress during a classroom intervention.

Directions. When finished working with the student each day, the educator responsible for completing the RTI-DBR completes each rating item on the form. There are sufficient rating columns on one form to rate a student each day for an entire instructional week. The rater can also write daily comments on the back of the form.

An additional option is for the educator to send a copy of the completed rating form home each week for the student's parent to review, sign, and return.

Tips to Increase the Reliability of Daily Behavior Reports. Daily Behavior Reports can be good sources of teacher information about student behaviors. When an educator's ratings on Behavior Reports are based solely on subjective impression, however, it is possible that the rater will apply inconsistent standards each day when rating student behaviors (Chafouleas, Riley-Tillman, & Sugai, 2007). This inconsistency in assessment can reduce the usefulness of Daily Behavior Report information. An approach that educators can follow to keep their ratings on the RTI-DBR consistent and objective over time is to come up with specific, objective criteria for rating each behavioral goal. In particular, the rater will want to:

- Keep in mind student developmental considerations. For example, consider this RTI-DBR item: The student was respectful to the teacher and other adults and complied with their requests in a timely manner. The definition of a student being " respectful to the teacher and other adults" may mean "without throwing a tantrum" for a kindergarten student but mean "without defiant talking-back" for a student in middle school.
- Tie RTI-DBR ratings to classroom behavioral norms. For each behavioral goal, the teacher may want to think of what the typical classroom norm is for this behavior and assign to the classroom norm a specific number rating. The teacher may decide, for instance, that the target student will earn a rating of 7 ('Usually/Always') each day that the student's compliance with adult requests closely matches that of an 'average' child in the classroom.

### Reference

Chafouleas, S., Riley-Tillman, T. C., & Sugai, G. (2007). *School-based behavioral assessment: Informing intervention and instruction.* Guilford Press: New York.

### STUDENT DAILY BEHAVIOR REPORT

Student Name:\_\_\_\_\_ Grade: \_\_\_\_\_

Person Completing This Report Card: \_\_\_\_\_

Directions: At the end of the school day or class period, rate the student on the behaviors below. Write your ratings into the appropriate box on the right of the page and record the *date* of each rating. You may also write daily comments about the student's behavior on the back of this sheet.

Student Behaviors	MON	TUES	WED	THURS	FRI
	_/_/_	_/_/_	_/_/_	//	/
The student got along with classmates and					
used socially appropriate behaviors.					
1 2 3 4 5 6 7 8 9					
Never/Seldom Sometimes Most/All of the Time					
The student was respectful to the teacher and					
other adults and complied with their requests					
in a timely manner.					
1 2 3 4 5 6 7 8 9					
Never/Seldom Sometimes Most/All of the Time					
The student paid attention to teacher					
instructions and classroom lessons and					
focused on his/her work assignments.					
1 2 3 4 5 6 7 8 9					
Never/Seldom Sometimes Most/All of the Time					
The student completed and turned in classwork					
and homework assignments.					
0-19% 20-39% 40-59% 60-79% 80-100%					
(Optional Behavior)					
1 2 3 4 5 6 7 8 9					
Never/Seldom Sometimes Most/All of the Time					

Parent Sign-Off (Optional): I have reviewed this Behavior Report Card and discussed it with my child.

Parent Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Daily Behavior Report: Optional Comments

MondayDate:							
Comments:							

Tuesday-- Date: \_\_\_\_\_

Comments: \_\_\_\_\_

Wednesday Date:						
Comments:						

Thursday Date:
Comments:

Friday Date:						
Comments:						

### Student Daily Behavior Report: Progress-Monitoring Chart

**Directions:** Plot daily teacher DBRC ratings and summarize notable teacher comments on the progress-monitoring charts below.

Student	Name:				
Start Date	• Wk 1://	Wk 2: / / /	_ Wk 3://	Wk 4: / / /	_
	M T W Th F	M T W Th F	MTWThF	MTWThF	
The student	got along with cla	ssmates and used	d socially approp	riate behaviors.	
	900000	00000	9 0 0 0 0 0	000009	
Usually/Always	800000	00000	8 0 0 0 0 0	00008	Usually/Always
	700000	00000	7 0 0 0 0 0	00007	
	60000	00000	6 0 0 0 0 0	000006	
Sometimes	500000	00000	5 0 0 0 0 0	000005	Sometimes
	400000	00000	4 0 0 0 0 0	000004	
	300000	00000	300000	00003	
Never/Seldom	200000	000002	2 0 0 0 0 0	000002	Never/Seldom
	100000	00000	1 0 0 0 0 0	000001	
	MTWThF	M T W Th F	M T W Th F	MTWThF	

The student was respectful to the teacher and other adults and complied with their requests in a timely manner.

	M T W Th F	M T W Th F	M T W Th F	M T W Th F	
	$1 \circ \circ \circ \circ \circ$	000001	00000	000001	
Never/Seldom	$2 \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	00002	00000	$\circ \circ \circ \circ \circ 2$	Never/Seldom
	300000	000003	00000	00003	
	400000	000004	00000	000004	
Sometimes	500000	000005	00000	0 0 0 0 0 5	Sometimes
	600000	000006	00000	000006	
	700000	000007	00000	000007	
Usually/Always	800000	000008	00000	00008	Usually/Always
	900000	000009	00000	000009	

The student paid attention to teacher instructions and classroom lessons and focused on his/her work assignments.

	M T W Th F	M T W Th F	M T W Th F	M T W Th F	
	100000	00001	00000	000001	
Never/Seldom	200000	0 0 0 0 0 2	00000	$\circ \circ \circ \circ \circ 2$	Never/Seldom
	300000	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 3$	00000	00003	
	400000	000004	00000	000004	
Sometimes	500000	000005	00000	000005	Sometimes
	60000	000006	00000	000006	
	700000	000007	00000	000007	
Usually/Always	800000	000008	00000	00008	Usually/Alway
	900000	000009	00000	000009	

Student Name:			
Start Date: wk 1://	Wk 2: / / /	_ Wk 3://	Wk 4: / /
M T W Th F	M T W Th F	M T W Th F	M T W Th F

The student completed and turned the following percentage of classwork and homework assignments.



[Optional Behavior]: \_\_\_\_\_

00000 00000 9 00000 00000 0000	900000				
000000000000000000000000000000000000	Usually/Always $8 \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$				
0000 00000 7 00000 000007	70000				
0000 00000 6 00000 000006	60000				
O         O	Sometimes $5 \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$				
0000 00000 4 00000 000004	40000				
00000 00000 3 00000 000003	30000				
> < < < < < < < < < < < < < < < < < < <	Never/Seldom 2 $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$				
00000 00000 1 00000 000001	10000				
TWTHF MTWTHF MTWTHF MTWTHF	M T W Th F				
Summary of Significant Teacher Comments:         Date: Comment:					
0       0	$3 \bigcirc 0 \bigcirc 0 \bigcirc 0$ $3 \bigcirc 0 \bigcirc 0 \bigcirc 0$ Never/Seldom $2 \bigcirc 0 \bigcirc 0 \bigcirc 0$ $1 \bigcirc 0 \bigcirc 0 \bigcirc 0$ M T W Th FSummary of Significant TeaDate: Comment:				

Date: \_\_\_\_ Comment:

Date: \_\_\_\_ Comment:

Date: \_\_\_\_ Comment:

Behavioral Frequency Count/Behavioral Rate. In a behavioral frequency count, an observer (e.g., the teacher) watches a student's behavior and keeps a cumulative tally of the number of times that the behavior is observed during a given period. Behaviors that are best measured using frequency counts have clearly observable beginning and end points—and are of relatively short duration.

Examples include:

- student call-outs
- requests for teacher help during independent seatwork.
- raising one's hand to make a contribution to large-group discussion.

Teachers can collect data on the frequency of observed student behaviors during a class period in several ways: (1) by keeping a cumulative mental tally of the behaviors; (2) by recording behaviors on paper (e.g., as tally marks) as they occur; or (3) using a golf counter or other simple mechanical device to record observed behaviors.

When multiple observations are made of student behaviors, those observations often last for differing periods of time. One method to standardize the results of observations conducted over varying timespans is to convert the results of each observation to a behavioral *rate* (behaviors divided by the length of the observation). To compute a behavioral rate, the observer (1) sums the total number of behaviors observed and (2) divides the total number of behaviors observed by total minutes in the observation period. The resulting figure represents a standardized 'behaviors observed per minute' and can be compared directly to student behavior rates observed at other times. For example, an observer may have noted that a student engaged in 5 call-outs during a 10-minute observation period. The observer then divides the 5 callouts by the 10 minute observation timespan to compute a standardized behavior rate of *0.5 callouts per minute*.

TIP: One use of the behavioral frequency count that teachers may find helpful is to tally the number of times that they need to approach and redirect an off-task, distracting, or behaviorally acting out student during an observation period (e.g., during math class). Whenever the student's identified problem behavior(s) escalate to the point at which the instructor can no longer ignore them, the teacher intervenes to redirect the student or provide other appropriate consequences. At the same time, the teacher counts this particular redirect episode toward the cumulative tally of redirects directed at the target student during the class period. While a tally of teacher redirects is not a suitable means to track all student behaviors, this approach does offer advantages. First, it recognizes that teachers typically have an informal but clear internal threshold of tolerance of student behaviors. Whenever the instructor approaches a student to redirect, the teacher does so because the student's behavior has moved above that 'tolerance threshold' and must be directly addressed. Second, teacher redirects are usually easier to measure; than other behavior targets--because the teacher has had to interrupt instruction –even briefly--to redirect the student and is thus more likely to note the incident and add it to a running tally.

Use the attached *Behavioral Frequency Count/Behavioral Rate Worksheet* to conduct behavioral frequency counts of a student across as many as 7 sessions.

Example: Ms. Stimson, a fourth-grade teacher, was concerned at the frequency that a student, Alice, frequently requested teacher assistance unnecessarily during independent seatwork. To address this concern, the teacher designed an intervention in which the student would first try several steps on her own to resolve issues or answer her questions before seeking help from the instructor. Prior to starting the intervention, the teacher kept a behavioral frequency count across three days of the number of times that the student approached her desk for help during a daily 20-minute independent seatwork period (baseline). Ms. Stimson discovered that, on average, the student sought requested help times per period (equivalent to 0.4 requests for help per minute). Ms. Stimson set as an intervention goal that, after 4 weeks of using her self-help strategies, the student's average rate of requesting help would drop to 1 time per independent seatwork period (equivalent to 0.05 requests for help per minute).

## Behavioral Frequency Count/Behavioral Rate Worksheet

	Student:	School Yr:	Classroom/Course:	
	<b>Behavior Definition:</b> Define in clear, measureable, observative frequency count (e.g., student call-outs during instructional	able terms the beha activities):	avior that will be measured using the l	pehavioral
Date: Behavic in the bo	// Start Time:: End Time:: or Frequency Count: During the observation, place a tally n ox below whenever the student displays the target behavior:	_ Setting/Activity: hark (' ') <b>To</b>	tal Observed Minutes of Behaviors Observation Time	Behavior Rate Per Minute
1		+	Divided Ed by	quals
Comme	nts:			
Date: Behavic in the bo 2	// Start Time:: End Time:: or Frequency Count: During the observation, place a tally n ox below whenever the student displays the target behavior:	_ Setting/Activity: hark (' ') To	tal Observed Minutes of Behaviors Observation Time Divided by	Behavior Rate Per Minute
	nts:			
Date: Behavic in the bc	// Start Time:: End Time:: or Frequency Count: During the observation, place a tally n ox below whenever the student displays the target behavior:	_ Setting/Activity: nark (' ') To	tal Observed Minutes of Behaviors Observation Time	Behavior Rate Per Minute
3		•	Divided Ed by	quals
Comme	nts:			

Date:// Start Time:: End Time:: Setting,	/Activity	y:				
Behavior Frequency Count: During the observation, place a tally mark (' ') in the box below whenever the student displays the target behavior:	ן ר	Total Observ Behaviors	ved N S Obse	linutes of ervation Tim	ie	Behavior Rate Per Minute
4	-		Divided by		Equals	
Comments:						
Date:/ Start Time:: End Time:: Setting, Behavior Frequency Count: During the observation, place a tally mark (' ')	Activit <u>)</u> Activit	y: Fotal Observ Behaviors	ved N	Ainutes of		Behavior Rate
5	-		Divided by		Equals	
Comments:	_	L				
Date:/ Start Time:: End Time:: Setting, Behavior Frequency Count: During the observation, place a tally mark (' ') in the box below whenever the student displays the target behavior:	/Activit <u>y</u> 1	y: Fotal Observ Behaviors	ved M S Obse	Ainutes of ervation Tim	ie	Behavior Rate Per Minute
6	-		Divided by		Equals	
Comments:						
Date:/ Start Time:: End Time:: Setting, Behavior Frequency Count: During the observation, place a tally mark (' ') in the box below whenever the student displays the target behavior:	Activit <u>)</u> Activit <u></u>	y: Fotal Observ Behaviors	ved M	Ainutes of		Behavior Rate Per Minute
7	-		Divided by		Equals	
Comments:			-			

## **Classroom Attention Observation Form**

Student Name:	
Observer:       Location:       Start Time:       End Time:         Description of Activities:	
Description of Activities:	
Directions: Observe the student at a time when the student is engaged in independent seatwork or attending to large-group instruction. <i>On-Task Behavior</i> is the only behavior being recorded. It is coded using a momentary time-sampling procedure. At the start of each 15-second interval, glance at the target child for approximately two seconds and determine if the child is on-task or off-task during the brief observation. If the child is found to be on-task (attending to large-group instruction or doing his or her assigned seatwork), mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time).  NN-TASK ON-TASK	
Directions: Observe the student at a time when the student is engaged in independent seatwork or attending to large-group instruction. <i>On-Task Behavior</i> is the only behavior being recorded. It is coded using a momentary time-sampling procedure. At the start of each 15-second interval, glance at the target child for approximately two seconds and determine if the child is on-task or off-task during the brief observation. If the child is found to be on-task (attending to large-group instruction or doing his or her assigned seatwork), mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time).  Non-TASK ON-TASK	
Directions: Observe the student at a time when the student is engaged in independent seatwork or attending to large-group instruction. <i>On-Task Behavior</i> is the only behavior being recorded. It is coded using a momentary time-sampling procedure. At the start of each 15-second interval, glance at the target child for approximately two seconds and determine if the child is on-task or off-task during the brief observation. If the child is found to be on-task (attending to large-group instruction or doing his or her assigned seatwork), mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time).  Non-TASK ON-TASK	
attending to large-group instruction. <i>On-Task Behavior</i> is the only behavior being recorded. It is coded using a momentary time-sampling procedure. At the start of each 15-second interval, glance at the target child for approximately two seconds and determine if the child is on-task or off-task during the brief observation. If the child is found to be on-task (attending to large-group instruction or doing his or her assigned seatwork), mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time). <b>1 2 3 4 5 0N-TASK 0N-TASK 1 1 1 1 1 1 1 1 1 1</b>	
approximately two seconds and determine if the child is on-task or off-task during the brief observation. If the child is found to be on-task (attending to large-group instruction or doing his or her assigned seatwork), mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time). <b>1 2 3 4 5 0N-TASK 0N-TASK</b>	
the child is found to be on-task (attending to large-group instruction or doing his or her assigned seatwork), mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time). <b>1 2 3 4 5 0.00 0.15 0.30 0.45 1.00 1.15 1.30 1.45 2.00 2.15 2.30 2.45 3.00 3.15 3.30 3.45 4.00 4.15 4.30 CON-TASK</b>	
mark the interval with an "X." If the child is off-task, leave the article unmarked. Then keep running notes of any student behaviors or classroom events until the onset of the next time interval. When the observation is finished, use Table 1 below to calculate the student's <i>time on task</i> (engaged academic time). 1 2 3 4 5 0:00 0:15 0:30 0:45 1:00 1:15 1:30 1:45 2:00 2:15 2:30 2:45 3:00 3:15 3:30 3:45 4:00 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:40 4:15 4:30 1:45 1:45 1:40 4:15 4:30 1:45 1:45 1:45 1:45 1:45 1:45 1:45 1:45	
Image: Note that the state of the state	
1     2     3     4     5       0:00     0:15     0:30     0:45     1:00     1:15     1:30     1:45     2:00     2:15     2:30     2:45     3:00     3:15     3:30     3:45     4:00     4:15     4:30       ON-TASK     Image: Constraint of the state of the st	
0:00       0:15       0:30       0:45       1:00       1:15       1:30       1:45       2:00       2:15       2:30       2:45       3:00       3:15       3:30       3:45       4:00       4:15       4:30         ON-TASK	
ON-TASK	4:45
6 7 8 9 10	
5:00         5:15         5:30         5:45         6:00         6:15         6:30         6:45         7:00         7:15         7:30         7:45         8:00         8:15         8:30         8:45         9:00         9:15         9:30	9:45
ON-TASK	
<b>10:00</b> 10:15 10:30 10:45 <b>11:00</b> 11:15 11:30 11:45 <b>12:00</b> 12:15 12:30 12:45 <b>13:00</b> 13:15 13:30 13:45 <b>14:00</b> 14:15 14:30	14:45
Number of     The TOTAL     Rate (in decimal     Rate (in percenta)	ge
intervals in number of form) that the on which the On-	-Task
Type of     Task behavior     Observation     Ohr Task	ation.
Behavior was observed. period(s) occurred during the observation.	
ON-TASK Divided Equals Times 100 =	
	%

Describe any notable student behaviors or other classroom events observed during the session:

Behavior Log. Behavior logs are narrative 'incident reports' that the teacher records about problem student behaviors. The teacher makes a log entry each time that a behavior is observed. An advantage of behavior logs is that they can provide information about the context within which a behavior occurs.(Disciplinary office referrals are a specialized example of a behavior log.)

Behavior logs are most useful for tracking problem behaviors that are serious but do not occur frequently.

NOTE: A sample Behavior Log form appears on the next page.

Example: Mrs. Roland, a 6<sup>th</sup>-grade Science teacher, had difficulty managing the behavior of a student, Bill. While Bill was often passively non-compliant, he would occasionally escalate, become loudly defiant and confrontational, and then be sent to the principal's office.

Because Mrs. Roland did not fully understand what factors might be triggering these student outbursts, she began to keep a behavior log. In that log, she recorded instances when Bill's behavior would escalate to become confrontational. Among other information, Mrs. Roland's behavior logs noted the date and time of each behavioral outburst, its duration and severity, what activity the class was engaged in when Bill's behavioral outburst occurred, and the disciplinary outcome. After three weeks, she had logged 4 behavioral incidents, establishing a **baseline** of about 1 incident every 3.75 instructional days.

Mrs. Roland hypothesized that Bill became confrontational to escape class activities that required him to read aloud within the hearing of his classmates. As an intervention plan, she changed class activities to eliminate public readings, matched Bill to a supportive class 'buddy', and also provided Bill with additional intervention in reading comprehension 'fix up' skills. Mrs. Roland set as an **intervention goal** that within 4 weeks Bill's rate of serious confrontational outbursts would drop to zero.

### Behavior Log & Student Behavioral Scatterplot

Directions: Record each incident of problem student behavior in the behavior log below.

Student Name:		Observer:	
Time:; a.m./p.m. Date://	Location:		
Brief narrative of incident (including persons involve	ed, scheduled ac	tivity, triggering event(s),	outcome(s));
How long did this incident last? mins			
How severe was the behavior in the incident?	1 Not Severe	2 Somewhat Severe	3 Very Severe

Student Name:	Observer:
Time:; a.m./p.m. Date:// Loca Brief narrative of incident (including persons involved, sch	cation:
How long did this incident last? mins	
How severe was the behavior in the incident? Not Sev	1 2 3 evere Somewhat Severe Very Severe

### **Behavioral Scatterplot**

**Directions:** Write the student's general daily schedule in the column labeled 'Activity/Class Schedule'. For each day during which target problems behaviors were monitored in the student's *behavioral log*, mark an 'X' in the appropriate date column at the time when the problem behavior occurred. When all behaviors have been plotted at the correct date and time of their occurrence, look for possible explanatory patterns between the activities scheduled and the behaviors observed --e.g., due to physical setting variables, academic task demands, presence or absence of adult supervision, etc.

Time	Activity / Class Schedule	Date/Day	Date/Day	Date/Day	Date/Day	Date/Day
7:30-7:45						
7:45-8:00	+					
8:00-8:15						
8:15-8:30	+					
8:30-8:45	+					
8:45-9:00						
9:00-9:15						
9:15-9:30						
9:30-9:45						
9:45-10:00	1	1				
10:00-10:15						
10:15-10:30	1	1				
10:30-10:45	1	1				
10:45-11:00	1	1				
11:00-11:15						
11:15-11:30						
11:30-11:45	1	1				
11:45-12:00	1	1				
12:00-12:15						
12:15-12:30	1	1				
12:30-12:45	1	1				
12:45-1:00	1	]				
1:00-1:15						
1:15-1:30	1	]				
1:30-1:45	I	]				
1:45-2:00						
2:00-2:15						
2:15-2:30		]				
2:30-2:45		]				
2:45-3:00						
3:00-3:15						
3:15-3:30	1	1				
3:30-3:45	I	]		[	[	
3:45-4:00						
4:00-4:15						
4:15-4:30	Ι	]		[	[	

36

### How To: Manage Problem Behaviors: Check-In/Check-Out

Students can be motivated to improve classroom behaviors if they have both a clear roadmap of the teacher's behavioral expectations and incentives to work toward those behavioral goals. This modified version of Check-In/Check-Out (CI/CO) is a simple behavioral intervention package designed for use during a single 30- to 90-minute classroom period (Dart, Cook, Collins, Gresham & Chenier, 2012). The teacher checks in with the student to set behavioral goals at the start of the period, then checks out with the student at the close of the period to rate that student's conduct and award points or other incentives earned for attaining behavioral goal(s).

Preparation. In preparation for using CI/CO, the teacher:

- selects 3 to 4 behaviors to be targeted during the intervention. Whenever possible, these should be stated
  positively as DO behaviors (e.g., "Promptly and quietly follow teacher requests") rather than DON'T behaviors
  (e.g., "Don't dawdle or talk back when given a teacher request").
- creates a Behavior Report Card (BRC) that incorporates the 3-4 target behaviors. A Behavior Report Card is a
  rating scale that the teacher uses to rate the student's behavior at the end of the class session or other
  evaluation period. A generic BRC suitable for use in check-in/check-out appears elsewhere in this document.
  Teachers can also create customized BRCs for free at:
  http://www.interventioncentral.org/teacher-resources/behavior-rating-scales-report-card-maker
- decides on a daily reward/incentive that the student will earn if successful in displaying positive behaviors (e.g., 5 minutes of free time; 3 'positive behavior points' to be redeemed in future for rewards from a prize box; parent phone call praising student).
- sets a minimum rating on the BRC items that the student must attain to earn the selected reward/incentive.
- meets with the student to explain the intervention, review behavioral expectations, demonstrate how the Behavior Report Card is to be filled out, and explain how the student can earn a daily reward/incentive.

Procedure. During any class session or evaluation period when CI/CO is in effect, the teacher follows these 3 steps:

- 1. Check-In. At the start of the class session, the teacher meets briefly with the student to review the behavioral goals on the Behavior Report Card and to provide encouragement. The teacher also prompts the student to set a behavioral goal on at least one of the target behaviors (e.g., "Today I will not leave my seat once without permission.").
- 2. Monitoring/Evaluation. During the session, the teacher observes the student's behaviors. At the end of the session, the teacher rates the student's behaviors on the Behavior Report Card.
- 3. Check-Out. At the end of the session, the teacher again meets briefly with the student. The student reports out on whether he/she was able to attain the behavioral goal(s) discussed at check-in. The teacher then shares the BRC ratings. If the student has earned a reward/incentive, the teacher awards it and praises the student. If the student fails to earn the reward, the teacher provides encouragement about success in a future session.

### Reference

Dart, E. H., Cook, C. R., Collins, T. A., Gresham, F. M., & Chenier, J. S. (2012). Test driving interventions to increase treatment integrity and student outcomes. *School Psychology Review*, *41*, 467-481.

## CHECK-IN/CHECK-OUT: BEHAVIOR REPORT CARD

Name: Grade:				
e student o d the <i>date</i> s sheet.	on the beha of each rati	iviors belov ing. You n	w. Write yo nay also wri	ur ratings te daily
MON	TUES	WED	THURS	FRI / /
	e student o d the <i>date</i> s sheet. <u>MON</u> //	e student on the beha d the <i>date</i> of each rational sheet.	Grade: e student on the behaviors below d the <i>date</i> of each rating. You m sheet.      MON TUES WED	Grade:

Parent Sign-Off (Optional): I have reviewed this Behavior Report Card and discussed it with my child.

Parent Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Check-In/Check-Out: Behavior Report Card: Progress-Monitoring Chart Directions: Plot daily teacher DBRC ratings and summarize notable teacher comments on the progress-monitoring charts below.

Student Na	ame:						
Start Date:	Wk 1: / /	Wk 2: / /	Wk 3: / /	Wk 4: / /			
	M T W Th F	M T W Th F	M T W Th F	M T W Th F			
The student g	The student got along with classmates and used socially appropriate behaviors.						
	900000	000009	00000	00009			
Usually/Always	800000	000008	00000	000008	Usually/Always		
-	100000	000007	00000	0 0 0 0 07			
(	600000	000006	00000	000006			
Sometimes !	500000	000005	00000	00005	Sometimes		
	400000	000004	00000	0 0 0 0 0 4			
:	300000	00003	00000	0 $0$ $0$ $0$ $0$ $3$			
Never/Seldom	200000	000002	00000	0 0 0 0 0 2	Never/Seldom		
	100000	000001	00000	000001			

M T W Th F

M T W Th F

The student was respectful to the teacher and other adults and complied with their requests in a timely manner.

M T W Th F

MTWThF

	900000	000009	00000	000009
Usually/Always	800000	000008	00000	○ ○ ○ ○ ○ 8 Usually/Always
	70000C	000007	00000	0 0 0 0 07
	60000C	000006	00000	0 0 0 0 06
Sometimes	5 O O O O C	000005	00000	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 5$ Sometimes
	4 O O O O C	000004	00000	0 0 0 0 0 4
	30000C	000003	00000	0 0 0 0 0 3
Never/Seldom	200000	000002	00000	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 2$ Never/Seldom
	100000	000001	00000	000001
	M T W Th F	M T W Th F	M T W Th F	M T W Th F

The student paid attention to teacher instructions and classroom lessons and focused on his/her work assignments.

	900000	000009	00000	0 0 0 0 09
Usually/Always	800000	000008	00000	0 $0$ $0$ $0$ $0$ $0$ 8 Usually/Always
	100000	000007	00000	000007
	600000	000006	00000	000006
Sometimes	$5 \circ \circ \circ \circ \circ$	000005	00000	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 5$ Sometimes
	400000	000004	00000	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 4$
	300000	000003	00000	0 0 0 0 03
Never/Seldom	$2\ \bigcirc\ \bigcirc\ \bigcirc\ \bigcirc\ \bigcirc\ \bigcirc$	000002	00000	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 2$ Never/Seldom
	100000	000001	00000	000001
	M T W Th F	M T W Th F	M T W Th F	M T W Th F