RTI Teams: Following a Structured Problem-Solving Model

Jim Wright

www.interventioncentral.org
Workshop Agenda

- Review of ‘Best Practices’ in Tier 3 Problem-Solving Teams
- Writing Clear, Specific Student Academic & Behavioral Problems
- Structuring Intervention Data Collection to Include Baseline, Goal, Regular Progress-Monitoring
- Review of Classroom-Friendly Methods of Progress-Monitoring
RTI Assumption: Struggling Students Are ‘Typical’
Until Proven Otherwise...

RTI logic assumes that:

- A student who begins to struggle in general education is *typical*, and that
- It is general education’s responsibility to find the instructional strategies that will unlock the student’s learning potential

Only when the student shows through well-documented interventions that he or she has ‘failed to respond to intervention’ does RTI begin to investigate the possibility that the student may have a learning disability or other special education condition.
Response to Intervention

NYSED RTI Guidance Memo: April 2008

April 2008

TO: District Superintendents
   Superintendents of Public and Nonpublic Schools
   Presidents of Boards of Education
   Administrators of Charter Schools
   New York City Board of Education
   SETRC Project Directors and Professional Development Specialists
   Regional School Support Centers
   Organizations, Parents and Individuals Concerned with Special Education
   Commissioner’s Advisory Panel for Special Education

FROM: James P. DeLorenzo
      Statewide Coordinator for Special Education, Office of Vocational and
      Educational Services for Individuals with Disabilities

Jean C. Stevens
Associate Commissioner, Office of Instructional Support and Development

RE: Implementation of Response to Intervention Programs

The purpose of this memorandum is to encourage all school districts in New York State (NYS) to take timely actions to implement response to intervention (RtI) programs in its schools. RtI is a multi-tiered, problem-solving approach that identifies general education students struggling in academic and behavioral areas early and provides them with systematically applied strategies and targeted instruction at varying levels of intervention.

RtI represents an important educational strategy to close achievement gaps for all students, including students at risk, students with disabilities and English language learners, by preventing smaller learning problems from becoming insurmountable gaps. It has also been shown to lead to more appropriate identification of and interventions with students with learning disabilities. Each day educators make important decisions about students’ educational programs, including decisions as to whether a student who is struggling to meet the standards set for all children might need changes in the nature of early intervention and instruction or might have a learning disability. This decision as to whether a student has a learning disability must be based on extensive and accurate information that leads to the determination that the student’s learning difficulties are not the result of the instructional program or approach. RtI is an effective and instructionally relevant process to inform these decisions.
The Regents policy framework for RtI:

4. Authorizes the use of RtI in the State's criteria to determine learning disabilities (LD) and requires, effective July 1, 2012, that all school districts have an RtI program in place as part of the process to determine if a student in grades K-4 is a student with a learning disability in the area of reading. “Effective on or after July 1, 2012, a school district shall not use the severe discrepancy criteria to determine that a student in kindergarten through grade four has a learning disability in the area of reading.”

[8 NYCRR section 200.4(j)]

RTI ‘Pyramid of Interventions’

**Tier 1: Universal interventions.** Available to all students in a classroom or school. Can consist of whole-group or individual strategies or supports.

**Tier 2: Individualized interventions.** Subset of students receive interventions targeting specific specific needs.

**Tier 3: Intensive interventions.** Students who are ‘non-responders’ to Tiers 1 & 2 are referred to the RTI Team for more intensive interventions.
Response to Intervention

Tier 3 intervention is designed for those students who demonstrate insufficient progress in Tier 2. Tier 3 is typically reserved for approximately one to five percent of students in a class who will receive more intensive instruction in addition to their core instruction. Tier 3 differs from Tier 2 instruction in terms of such factors as time, duration, group size, frequency of progress monitoring and focus. This tier provides greater individualized instruction in a small group setting (generally one to two students at a time) anywhere from 30 to 60 minutes at a minimum of four days per week. The progress of students at Tier 3 is monitored more frequently, at least once a week, to determine the student’s response to intervention. Instruction is provided by school personnel who are highly skilled or trained in the areas of academic need indicated by student performance data. The setting for Tier 3 intervention is determined by school personnel. It is important to note that Tier 3 is considered supplemental instruction to Tier 1 and is not intended to replace Tier 1 instruction. Similar to Tier 2, school personnel must conduct regular fidelity checks to determine if the intervention was implemented the way it was intended.

Tier 3: Intensive Individualized Interventions (Problem-Solving Model)

Tier 3 interventions are the most intensive offered in a school setting. About 5% of a general-education student population may qualify for Tier 3 supports. Typically, the RTI Problem-Solving Team meets to develop intervention plans for Tier 3 students.

Students qualify for Tier 3 interventions because:

– they are found to have a large skill gap when compared to their class or grade peers; and/or
– They did not respond to interventions provided previously at Tiers 1 & 2.

Tier 3 interventions are provided daily for sessions of 30 minutes. The student-teacher ratio is flexible but should allow the student to receive intensive, individualized instruction. The academic or behavioral progress of students in Tier 3 interventions is monitored at least weekly.

Response to Intervention

Tier 3: RTI Team

- Decision Point: RTI Problem-Solving Team
- Collaboration Opportunity: Weekly RTI Problem-Solving Team meetings are scheduled to handle referrals of students that failed to respond to interventions from Tiers 1 & 2.
- Documentation: Teacher referral form; RTI Team minutes form; progress-monitoring data collected at least weekly.
- Decision Rules [Example]: If student has failed to respond adequately to 3 intervention trials of 6-8 weeks (from Tiers 2 and 3), the student may be referred to Special Education.
Tier 3 RTI Teams: The Basics
Small-Group Activity: Complete the RTI Team Effectiveness Self-Rating Scale

- As a group, use the RTI Team Self-Rating Scale to evaluate your current student problem-solving team’s level of functioning. If your school does not have a formal problem-solving team in place, rate your school’s current informal problem-solving efforts.

- Appoint a spokesperson to share your findings with the large group.

<table>
<thead>
<tr>
<th>Effective RTI Teams:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Are multi-disciplinary and include teachers among their members</td>
</tr>
<tr>
<td>• Follow a structured ‘problem-solving’ model</td>
</tr>
<tr>
<td>• Use data to analyze the academic problem and match the student to effective, evidence-based interventions</td>
</tr>
<tr>
<td>• Develop a detailed research-based intervention plan to help staff with implementation</td>
</tr>
<tr>
<td>• Check up on the teacher’s success in carrying out the intervention (‘intervention integrity’)</td>
</tr>
</tbody>
</table>
Response to Intervention

Tier 3 Interventions Are Developed With Assistance from the School's RTI (Problem-Solving) Team

Effective RTI Teams:

- Are multi-disciplinary and include classroom teachers among their members
- Follow a structured ‘problem-solving’ model
- Use data to analyze the academic problem and match the student to effective, evidence-based interventions
- Develop a detailed research-based intervention plan to help staff with implementation
- Check up on the teacher’s success in carrying out the intervention (‘intervention integrity’)

www.interventioncentral.org 13
The Problem-Solving Model & Multi-Disciplinary Teams

A school consultative process (‘the problem-solving model’) with roots in applied behavior analysis was developed (e.g., Bergan, 1995) that includes 4 steps:

- Problem Identification
- Problem Analysis
- Plan Implementation
- Problem Evaluation

Originally designed for individual consultation with teachers, the problem-solving model was later adapted in various forms to multi-disciplinary team settings.

The RTI Team: Definition

• Teams of educators at a school are trained to work together as effective problem-solvers.
• RTI Teams are made up of volunteers drawn from general- and special-education teachers and support staff.
• These teams use a structured meeting process to identify the underlying reasons that a student might be experiencing academic or behavioral difficulties.
• The team helps the referring teacher to put together practical, classroom-friendly interventions to address those student problems.
Teachers may *be motivated* to refer students to your RTI Team because they...

- can engage in collegial conversations about better ways to help struggling learners
- learn instructional and behavior-management strategies that they can use with similar students in the future
- increase their teaching time
- are able to access more intervention resources and supports in the building than if they work alone
- feel less isolated when dealing with challenging kids
- have help in documenting their intervention efforts
Focus on School Factors That We Can Control

“Some factors in students’ lives (such as family divorce, moving frequently, drug use, and poor teaching) lower the probability that these students will learn and/or get along with others. These are often referred to as risk factors. ... Risk factors do not assure student failure. Risk factors simply make the odds of failure greater. Aligning assessment and instruction allows teachers... to introduce new factors into the student’s life that raise the probability of learning. These are often called protective factors since they protect against the risks associated with risk factors... The use of protective factors to raise the probability of learning is often referred to as resilience.”

Team Roles

- Coordinator
- Facilitator
- Recorder
- Time Keeper
- Case Manager
RTI Team Consultative Process

**Step 1:** Assess Teacher Concerns 5 Mins

**Step 2:** Inventory Student Strengths/Talents 5 Mins

**Step 3:** Review Background/Baseline Data 5 Mins

**Step 4:** Select Target Teacher Concerns 5-10 Mins

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

**Step 6:** Design an Intervention Plan 15-20 Mins

**Step 7:** Plan How to Share Meeting Information with the Student’s Parent(s) 5 Mins

**Step 8:** Review Intervention & Monitoring Plans 5 Mins

[www.interventioncentral.org](http://www.interventioncentral.org)
Defining Student Academic & Behavioral Problems/Classroom Methods for Tracking Student Progress

Jim Wright
www.interventioncentral.org
Educational Decisions and Corresponding Types of Assessment

- SCREENING/BENCHMARKING DECISIONS: Tier 1: Brief screenings to quickly indicate whether students in the general-education population are academically proficient or at risk.

- PROGRESS-MONITORING DECISIONS: At Tiers 1, 2, and 3, ongoing ‘formative’ assessments to judge whether students on intervention are making adequate progress.

- INSTRUCTIONAL/DIAGNOSTIC DECISIONS: At any Tier, detailed assessment to map out specific academic deficits, discover the root cause(s) of a student’s academic problem.

- OUTCOME DECISIONS: Summative assessment (e.g., state tests) to evaluate the effectiveness of a program.

Response to Intervention

RTI ‘Pyramid of Interventions’

**Tier 1: Universal interventions.** Available to all students in a classroom or school. Can consist of whole-group or individual strategies or supports.

**Tier 2: Individualized interventions.** Subset of students receive interventions targeting specific needs.

**Tier 3: Intensive interventions.** Students who are ‘non-responders’ to Tiers 1 & 2 are referred to the RTI Team for more intensive interventions.
Tier 1 Core Instruction

Tier I core instruction:

- Is universal—available to all students.
- Can be delivered within classrooms or throughout the school.
- Is an ongoing process of developing strong classroom instructional practices to reach the largest number of struggling learners.

All children have access to Tier 1 instruction/interventions. Teachers have the capability to use those strategies without requiring outside assistance.

Tier 1 instruction encompasses:

- The school’s core curriculum.
- All published or teacher-made materials used to deliver that curriculum.
- Teacher use of ‘whole-group’ teaching & management strategies.

Tier I instruction addresses this question: Are strong classroom instructional strategies sufficient to help the student to achieve academic success?
Tier I (Classroom) Intervention

Tier 1 intervention:

- Targets ‘red flag’ students who are not successful with core instruction alone.
- Uses ‘evidence-based’ strategies to address student academic or behavioral concerns.
- Must be feasible to implement given the resources available in the classroom.

Tier I intervention addresses the question: Does the student make adequate progress when the instructor uses specific academic or behavioral strategies matched to the presenting concern?
The Key RTI Role of Classroom Teachers as Tier 1 ‘Interventionists’: 6 Steps

1. **The teacher defines the student academic or behavioral problem clearly.**

2. **The teacher decides on the best explanation for why the problem is occurring.**

3. **The teacher selects ‘evidence-based’ interventions.**

4. **The teacher documents the student’s Tier 1 intervention plan.**

5. **The teacher monitors the student’s response (progress) to the intervention plan.**

6. **The teacher knows what the next steps are when a student fails to make adequate progress with Tier 1 interventions alone.**
Interventions: Potential ‘Fatal Flaws’

Any intervention must include 4 essential elements. The absence of any one of the elements would be considered a ‘fatal flaw’ (Witt, VanDerHeyden & Gilbertson, 2004):

1. **Clearly defined problem.** The student’s target concern is stated in specific, observable, measureable terms. This ‘problem identification statement’ is the most important step of the problem-solving model (Bergan, 1995), as a clearly defined problem allows the teacher or RTI Team to select a well-matched intervention to address it.

2. **Baseline data.** The teacher or RTI Team measures the student’s academic skills in the target concern (e.g., reading fluency, math computation) prior to beginning the intervention. Baseline data becomes the point of comparison throughout the intervention to help the school to determine whether the intervention is effective.

Interventions: Potential ‘Fatal Flaws’ (Cont.)

3. **Performance goal.** The teacher or RTI Team sets a specific, data-based goal for student improvement during the intervention and a checkpoint date by which the goal should be attained.

4. **Progress-monitoring plan.** The teacher or RTI Team collects student data regularly to determine whether the student is on-track to reach the performance goal.

Defining Student Problem Behaviors: A Key to Identifying Effective Interventions

Jim Wright

www.interventioncentral.org
Create a Problem Behavior ID Statement

• At your tables:
  – Discuss students whose behaviors pose a challenge in your classroom or school.
  – Select one of those students discussed.
  – For that student, write down a ‘problem identification statement’ that describes the problem behavior.
Defining Problem Student Behaviors...

1. **Define the problem behavior in clear, observable, measurable terms** (Batsche et al., 2008; Upah, 2008). Write a clear description of the problem behavior. Avoid vague problem identification statements such as “The student is disruptive.”

A well-written problem definition should include three parts:

- **Conditions.** The condition(s) under which the problem is likely to occur
- **Problem Description.** A specific description of the problem behavior
- **Contextual information.** Information about the frequency, intensity, duration, or other dimension(s) of the behavior that provide a context for estimating the degree to which the behavior presents a problem in the setting(s) in which it occurs.
### Sample Problem Behavior Definitions

<table>
<thead>
<tr>
<th>Conditions. The condition(s) under which the problem is likely to occur</th>
<th>Problem Description. A specific description of the problem behavior</th>
<th>Contextual Information. Information about the frequency, intensity, duration, or other dimension(s) of the behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>During 20-minute independent seatwork literacy tasks,...</td>
<td>...John talks with peers about non-instructional topics...</td>
<td>...an average of three times.</td>
</tr>
<tr>
<td>In school settings such as the playground or gymnasium, when unsupervised by adults,...</td>
<td>...Angela is reported by peers to use physically threatening language...</td>
<td>...at least once per week.</td>
</tr>
<tr>
<td>When given a verbal teacher request...</td>
<td>...Jay fails to comply with that request within 3 minutes...</td>
<td>... an average of 50% of the time.</td>
</tr>
</tbody>
</table>
Defining Student Problem Behaviors: Team Activity

Using the student selected by your team:

- Step 1: Define the problem behavior in clear, observable, measurable terms.
- Develop examples and non-examples of the problem behavior.
- Write a behavior hypothesis statement.
- Select a replacement behavior.
- Write a prediction statement.
Defining Problem Student Behaviors...

2. Develop examples and non-examples of the problem behavior (Upah, 2008). Writing both examples and non-examples of the problem behavior helps to resolve uncertainty about when the student’s conduct should be classified as a problem behavior. Examples should include the most frequent or typical instances of the student problem behavior. Non-examples should include any behaviors that are acceptable conduct but might possibly be confused with the problem behavior.
# Examples and Non-Examples of Problem Behavior

<table>
<thead>
<tr>
<th>Problem Behavior</th>
<th>Examples</th>
<th>Non-Examples</th>
</tr>
</thead>
</table>
| During 20-minute independent seatwork literacy tasks, John talks with peers about non-instructional topics | • John chats with another student that he encounters at the pencil sharpener.  
• John whispers to a neighboring student about a comic book in his desk.    | • At the direction of the teacher, John pairs up with another student to complete an assignment.  
• John verbally interacts with students in an appropriate manner while handing out work materials as requested by the teacher. |
| When given a verbal teacher request, Jay fails to comply with that request within 3 minutes. | • Jay does not comply when directed by the teacher to open his math book and begin work.  
• Jay is verbally defiant and uncooperative when requested by an adult to stop running in the hall. | • Jay does not comply with a teacher request because he does not hear that request.  
• Jay asks the teacher to explain directions that he does not understand.      |
Defining Student Problem Behaviors: Team Activity

Using the student selected by your team:

- Step 2: Develop examples and non-examples of the problem behavior.

Five Steps in Understanding & Addressing Problem Behaviors:

1. Define the problem behavior in clear, observable, measurable terms.

2. Develop examples and non-examples of the problem behavior.

3. Write a behavior hypothesis statement.

4. Select a replacement behavior.

5. Write a prediction statement.
Defining Problem Student Behaviors...

3. **Write a behavior hypothesis statement** (Batsche et al., 2008; Upah, 2008). The next step in problem-solving is to develop a hypothesis about why the student is engaging in an undesirable behavior or not engaging in a desired behavior. Teachers can gain information to develop a hypothesis through direct observation, student interview, review of student work products, and other sources. The behavior hypothesis statement is important because (a) it can be tested, and (b) it provides guidance on the type(s) of interventions that might benefit the student.
### Behavior Hypothesis Statements

<table>
<thead>
<tr>
<th>Problem Behavior</th>
<th>&lt;Because&gt;</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>During 20-minute independent seatwork literacy tasks, John talks with peers about non-instructional topics...</td>
<td>...because...</td>
<td>...he is avoiding academic work.</td>
</tr>
<tr>
<td>When given a verbal teacher request, Jay fails to comply with that request...</td>
<td>...because...</td>
<td>...he is reinforced by the negative adult attention that results from his noncompliance.</td>
</tr>
</tbody>
</table>
Defining Student Problem Behaviors: Team Activity

Using the student selected by your team:

- Step 3: Write a behavior hypothesis statement.

Five Steps in Understanding & Addressing Problem Behaviors:

1. Define the problem behavior in clear, observable, measurable terms.
2. Develop examples and non-examples of the problem behavior.
3. Write a behavior hypothesis statement.
4. Select a replacement behavior.
5. Write a prediction statement.
4. **Select a replacement behavior** (Batsche et al., 2008). Behavioral interventions should be focused on increasing student skills and capacities, not simply on suppressing problem behaviors. By selecting a positive behavioral goal that is an appropriate replacement for the student’s original problem behavior, the teacher reframes the student concern in a manner that allows for more effective intervention planning.
## Selection of Replacement Behavior

<table>
<thead>
<tr>
<th>Problem Behavior</th>
<th>Replacement Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>During 20-minute independent seatwork literacy tasks, John talks with peers about non-instructional topics.</td>
<td>During 20-minute independent seatwork literacy tasks, John is engaged in active accurate academic responding.</td>
</tr>
<tr>
<td>When given a verbal teacher request, Jay fails to comply with that request.</td>
<td>When given a verbal teacher request, Jay carries out the request without argument or complaint within 3 minutes.</td>
</tr>
</tbody>
</table>
Defining Student Problem Behaviors: Team Activity

Using the student selected by your team:

- Step 4: Select a replacement behavior.

Five Steps in Understanding & Addressing Problem Behaviors:

1. Define the problem behavior in clear, observable, measurable terms.

2. Develop examples and non-examples of the problem behavior.

3. Write a behavior hypothesis statement.

4. **Select a replacement behavior.**

5. Write a prediction statement.
5. **Write a prediction statement** (Batsche et al., 2008; Upah, 2008). The prediction statement proposes a strategy (intervention) that is predicted to improve the problem behavior. The importance of the prediction statement is that it spells out specifically the expected outcome if the strategy is successful. The formula for writing a prediction statement is to state that *if* the proposed strategy (‘Specific Action’) is adopted, then the *rate* of problem behavior is expected to *decrease* or *increase* in the desired direction.
## Prediction Statement

<table>
<thead>
<tr>
<th>Specific Action</th>
<th>Problem Behavior</th>
<th>Rate of Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>If prior to independent seatwork, John meets with a tutor to review key vocabulary terms and rehearse the assigned reading,...</td>
<td>...the amount of time that John spends talking with peers about non-instructional topics during independent work...</td>
<td>...will decrease.</td>
</tr>
<tr>
<td>If adults avoid engaging Jay in long exchanges when he fails to comply with their requests and instead impose appropriate pre-selected consequences...</td>
<td>...the frequency of Jay’s timely compliance with adult requests...</td>
<td>...will increase.</td>
</tr>
</tbody>
</table>
Defining Student Problem Behaviors: Team Activity

Using the student selected by your team:

- Step 5: Write a prediction statement.

Five Steps in Understanding & Addressing Problem Behaviors:

1. Define the problem behavior in clear, observable, measurable terms.
2. Develop examples and non-examples of the problem behavior.
3. Write a behavior hypothesis statement.
4. Select a replacement behavior.
5. Write a prediction statement.
Finding the Right Behavioral Intervention: Five Steps to Defining Student Problem Behaviors

Teachers can select effective interventions for student behavior problems only if they first clearly define the problem behavior(s) and the reason(s) that a behavior is occurring.

The process of defining student problem behaviors goes more smoothly if the teacher has first collected relevant information about the student’s problem behavior (e.g., examples of seatwork, anecdotal notes of student behavior, frequency counts of behavior, student interview, etc.).

By following the five steps below, the teacher is more likely to describe a student’s problem behavior(s) with clarity and to identify effective interventions to address them.

1. Define the problem behavior in clear, observable, measurable terms.

<table>
<thead>
<tr>
<th>Sample Problem Behavior Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions: The condition(s) under which the problem is likely to occur</td>
</tr>
</tbody>
</table>

2. Develop examples and non-examples of the problem behavior.

<table>
<thead>
<tr>
<th>Examples and Non-Examples of Problem Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples</td>
</tr>
</tbody>
</table>

3. Write a behavior hypothesis statement.

<table>
<thead>
<tr>
<th>Behavior Hypothesis Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Behavior</td>
</tr>
<tr>
<td>...because...</td>
</tr>
</tbody>
</table>

4. Select a replacement behavior.

<table>
<thead>
<tr>
<th>Selection of Replacement Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Behavior</td>
</tr>
</tbody>
</table>

5. Create a prediction statement.

<table>
<thead>
<tr>
<th>Prediction Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Action</td>
</tr>
</tbody>
</table>
At your tables:

- Consider the topic **Helping teachers to write clear, specific problem-identification statements for academic and behavioral problems.**

- What are ways that classroom teachers can use this behavioral problem ID framework to better solve student problems?
Defining Academic Problems: Get It Right and Interventions Are More Likely to Be Effective

Jim Wright
www.interventioncentral.org
Defining Academic Problems: Recommended Steps

1. **Be knowledgeable of the school academic curriculum and key student academic skills that are taught.** The teacher should have a good survey-level knowledge of the key academic skills outlined in the school’s curriculum—for the grade level of their classroom as well as earlier grade levels. If the curriculum alone is not adequate for describing a student’s academic deficit, the instructor can make use of research-based definitions or complete a task analysis to further define the academic problem area. Here are guidelines for consulting curriculum and research-based definitions and for conducting a task analysis for more global skills.
Defining Academic Problems: Recommended Steps

Curriculum. The teacher can review the school’s curriculum and related documents (e.g., score-and-sequence charts; curriculum maps) to select specific academic skill or performance goals. First, determine the approximate grade or level in the curriculum that matches the student’s skills. Then, review the curriculum at that alternate grade level to find appropriate descriptions of the student’s relevant academic deficit.

For example, a second-grade student had limited phonemic awareness. The student was not able accurately to deconstruct a spoken word into its component sound-units, or phonemes. In the school’s curriculum, children were expected to attain proficiency in phonemic awareness by the close of grade 1. The teacher went ‘off level’ to review the grade 1 curriculum and found a specific description of phonemic awareness that she could use as a starting point in defining the student’s skill deficit.
Defining Academic Problems: Recommended Steps

Research-Based Skill Definitions. Even when a school’s curriculum identifies key skills, schools may find it useful to corroborate or elaborate those skill definitions by reviewing alternative definitions published in research journals or other trusted sources.

For example, a student had delays in solving quadratic equations. The math instructor found that the school’s math curriculum did not provide a detailed description of the skills required to successfully complete quadratic equations. So the teacher reviewed the National Mathematics Advisory Panel report (Fennell et al., 2008) and found a detailed description of component skills for solving quadratic equations. By combining the skill definitions from the school curriculum with the more detailed descriptions taken from the research-based document, the teacher could better pinpoint the student’s academic deficit in specific terms.
Defining Academic Problems: Recommended Steps

Task Analysis. Students may possess deficits in more global ‘academic enabling’ skills that are essential for academic success. Teachers can complete an task analysis of the relevant skill by breaking it down into a checklist of constituent subskills. An instructor can use the resulting checklist to verify that the student can or cannot perform each of the subskills that make up the global ‘academic enabling’ skill.

For example, teachers at a middle school noted that many of their students seemed to have poor ‘organization’ skills. Those instructors conducted a task analysis and determined that—in their classrooms—the essential subskills of ‘student organization’ included (a) arriving to class on time; (b) bringing work materials to class; (c) following teacher directions in a timely manner; (d) knowing how to request teacher assistance when needed; and (e) having an uncluttered desk with only essential work materials.
2. Describe the academic problem in specific, skill-based terms (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. Here are sample problem-identification statements:

- John reads aloud from grade-appropriate text much more slowly than his classmates.
- Ann lacks proficiency with multiplication math problems (double-digit times double-digit with no regrouping).
- Tye does not turn in homework assignments.
- Angela produces limited text on in-class writing assignments.
Defining Academic Problems: Recommended Steps

3. **Develop a fuller description of the academic problem to provide a meaningful instructional context.** When the teacher has described the student’s academic problem, the next step is to expand the problem definition to put it into a meaningful context. This expanded definition includes 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 in which the student is engaged. Include rate, accuracy, or other quantitative information of student performance.
- **Typical or Expected Level of Performance.** Provide a typical or expected performance criterion for this skill or behavior. Typical or expected academic performance can be calculated using a variety of sources.
<table>
<thead>
<tr>
<th>Environmental Conditions or Task Demands</th>
<th>Problem Description</th>
<th>Typical or Expected Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>When given a 3&lt;sup&gt;rd&lt;/sup&gt; grade DIBELS oral reading fluency passage...</td>
<td>...John reads 56 words per minutes...</td>
<td>... compared to DIBELS mid-year 3&lt;sup&gt;rd&lt;/sup&gt;-grade benchmark norms of 78 words per minute.</td>
</tr>
<tr>
<td>On a math computation worksheet (double-digit times double-digit with no regrouping)...</td>
<td>...Ann computes 45 digits per minute...</td>
<td>...while peers in her 3&lt;sup&gt;rd&lt;/sup&gt; grade compute an average of 67 correct digits.</td>
</tr>
<tr>
<td>During social studies large-group instruction...</td>
<td>...Franklin attends to instruction an average of 45% of the time...</td>
<td>... while peers in the same room attend to instruction an average of 85% of the time.</td>
</tr>
<tr>
<td>For science homework...</td>
<td>...Tye turns in assignments an average of 50% of the time...</td>
<td>... while the classroom median rate of homework turned in is 90%.</td>
</tr>
<tr>
<td>On weekly 30-minute in-class writing assignments...</td>
<td>...Angela produces compositions that average 145 words...</td>
<td>...while a sampling of peer compositions shows that the typical student writes an average of 254 words.</td>
</tr>
</tbody>
</table>
4. 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.
### Academic Problems: Possible Hypotheses & Recommendations

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skill Deficit.</strong> The student has not yet acquired the skill.</td>
<td>Provide direct, explicit instruction to acquire the skill. Reinforce the student for effort and accuracy.</td>
</tr>
<tr>
<td><strong>Fluency Deficit.</strong> The student has acquired the basic skill but is not yet proficient.</td>
<td>Provide opportunities for the student to practice the skill and give timely performance feedback. Reinforce the student for fluency as well as accuracy.</td>
</tr>
<tr>
<td><strong>Generalization Deficit.</strong> The student possesses the basic skill but fails to use it across appropriate situations or settings.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Motivation (Performance) Deficit.</strong> The student is capable of performing the skill and can identify when use of the skill is appropriate—but nonetheless fails to use the skill.</td>
<td>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.).</td>
</tr>
<tr>
<td><strong>Escape or Avoidance.</strong> The student behavior is intended to allow them to stop an academic activity (escape) or to prevent them from participating in the activity (avoidance).</td>
<td>Check for appropriate instructional match to ensure that the student experiences sufficient success in the activity. Use motivation strategies (see above) to promote student interest and engagement. Offer the student opportunities for choice in the academic activity.</td>
</tr>
</tbody>
</table>
Methods of Classroom Data Collection

Jim Wright
www.interventioncentral.org
Classroom Data Collection

**Existing data.** The teacher uses information already being collected in the classroom or school that is relevant to the identified student problem.

Examples of existing data include:

- grades
- attendance/tardy records,
- office disciplinary referrals
- homework completion

• **NOTE:** Existing data is often not sufficient alone to monitor a student on intervention but can be a useful **supplemental** source of data on academic or behavioral performance.
Existing Data: Example

Example: Mrs. Berman, a high-school social studies teacher, selected grades from weekly quizzes as one measure to determine if a study-skills intervention would help Rick, a student in her class. Prior to the intervention, the teacher computed the average of Rick’s most recent 4 quiz grades. The baseline average quiz grade for Rick was 61. Mrs. Smith set an average quiz grade of 75 as the intervention goal. The teacher decided that at the intervention check-up in six weeks, she would average the most recent 2 weekly quiz grades to see if the student reached the goal.
Classroom Data Collection

**Global skill checklist.** The teacher selects a global skill (e.g., homework completion; independent seatwork). The teacher then breaks the global skill down into a checklist of component sub-skills—a process known as ‘discrete categorization’ (Kazdin, 1989). An observer (e.g., teacher, another adult, or even the student) can then use the checklist to note whether a student successfully displays each of the sub-skills on a given day. Classroom teachers can use these checklists as convenient tools to assess whether a student has the minimum required range of academic enabling skills for classroom success.
Global Skills Checklist: Example

- Example: A middle school math instructor, Mr. Haverneck, was concerned that a student, Rodney, appears to have poor ‘organization skills’. Mr. Haverneck created a checklist of observable subskills that, in his opinion, were part of the global term ‘organization skills:
  - arriving to class on time;
  - bringing work materials to class;
  - following teacher directions in a timely manner;
  - knowing how to request teacher assistance when needed;
  - having an uncluttered desk with only essential work materials.

Mr. Haverneck monitored the student’s compliance with elements of this organization -skills checklist across three days of math class. On average, Rodney successfully carried out only 2 of the 5 possible subskills (baseline). Mr. Haverneck set the goal that by the last week of a 5-week intervention, the student would be found to use all five of the subskills on at least 4 out of 5 days.
‘Academic Enabler’ Observational Checklists: Measuring Students’ Ability to Manage Their Own Learning
‘Academic Enabler’ Skills: Why Are They Important?

Student academic success requires more than content knowledge or mastery of a collection of cognitive strategies. Academic accomplishment depends also on a set of ancillary skills and attributes called ‘academic enablers’ (DiPerna, 2006). Examples of academic enablers include:

- Study skills
- Homework completion
- Cooperative learning skills
- Organization
- Independent seatwork

‘Academic Enabler’ Skills: Why Are They Important? (Cont.)

Because academic enablers are often described as broad skill sets, however, they can be challenging to define in clear, specific, measureable terms. A useful method for defining a global academic enabling skill is to break it down into a checklist of component sub-skills—a process known as ‘discrete categorization’ (Kazdin, 1989). An observer can then use the checklist to note whether a student successfully displays each of the sub-skills.

‘Academic Enabler’ Skills: Why Are They Important? (Cont.)

Observational checklists that define academic enabling skills have several uses in Response to Intervention:

- Classroom teachers can use these skills checklists as convenient tools to assess whether a student possesses the minimum ‘starter set’ of academic enabling skills needed for classroom success.

- Teachers or tutors can share examples of academic-enabler skills checklists with students, training them in each of the sub-skills and encouraging them to use the checklists independently to take greater responsibility for their own learning.

- Teachers or other observers can use the academic enabler checklists periodically to monitor student progress during interventions—assessing formatively whether the student is using more of the sub-skills.

### ‘Academic Enabler’ Skills: Sample Observational Checklists

#### Study Skills

<table>
<thead>
<tr>
<th>Task</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takes complete, organized class notes in legible form and maintains them in one accessible note book</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Reviews class notes frequently (e.g., after each class) to ensure understanding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>When reviewing notes, uses highlighters, margin notes, or other strategies to note questions or areas of confusion for later review with teacher or tutor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Follows an efficient strategy to study for tests and quizzes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Allocates enough time to study for tests and quizzes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Is willing to seek help from the teacher to answer questions or clear up areas of confusion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Other: ___________________________________________________________

#### Comments:

____________________________________________________________________
____________________________________________________________________
### ‘Academic Enabler’ Skills: Sample Observational Checklists

<table>
<thead>
<tr>
<th>Organization Skills. The student:</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ arrives to class on time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>_</td>
</tr>
<tr>
<td>□ maintains organization of locker to allow student to efficiently store and retrieve needed books, assignments, work materials, and personal belongings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>_</td>
</tr>
<tr>
<td>□ maintains organization of backpack or book bag to allow student to efficiently store and retrieve needed books, assignments, work materials, and personal belongings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>_</td>
</tr>
<tr>
<td>□ brings to class the necessary work materials expected for the course (e.g., pen, paper, calculator, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>_</td>
</tr>
<tr>
<td>□ is efficient in switching work materials when transitioning from one in-class learning activity to another</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>_</td>
</tr>
</tbody>
</table>

□ Other: __________________________

Comments:

__________________________________________________________________________

__________________________________________________________________________
### Homework Completion

The student:

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>writes down homework assignments accurately and completely</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>makes use of available time in school (e.g., study halls, homeroom) to work on homework</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>has an organized, non-distracting workspace available at home to do homework</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>creates a work plan before starting homework (e.g., sequencing the order in which assignments are to be completed; selecting the most challenging assignment to start first when energy and concentration are highest)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>when completing homework, uses highlighters, margin notes, or other strategies to note questions or areas of confusion for later review with teacher or tutor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>turns in homework on time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>NA</td>
</tr>
</tbody>
</table>

**Other:**

Other:

Comments:

Comments:
‘Academic Enabler’ Skills: Sample Observational Checklists

<table>
<thead>
<tr>
<th>Cooperative Learning Skills. The student:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>participates in class discussion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gets along with others during group/pair activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participates fully in group/pair activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>does his or her ‘fair share’ of work during group/pair activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>is willing to take a leadership position during group/pair activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 'Academic Enabler' Skills: Sample Observational Checklists

**Independent Seat Work. The student:**

<table>
<thead>
<tr>
<th>Check</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ has necessary work materials for the assignment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ is on-task during the assignment at a level typical for students in the class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ refrains from distracting behaviors (e.g., talking with peers without permission, pen tapping, vocalizations such as loud sighs or mumbling, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ recognizes when he or she needs teacher assistance and is willing to that assistance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ requests teacher assistance in an appropriate manner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ requests assistance from the teacher only when really needed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ if finished with the independent assignment before time expires, uses remaining time to check work or engage in other academic activity allowed by teacher</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ takes care in completing work—as evidenced by the quality of the finished assignment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>□ is reliable in turning in assignments done in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

□ Other: __________________________________________________________________________

Comments: __________________________________________________________________________
### ‘Academic Enabler’ Skills: Sample Observational Checklists

#### Motivation

The student:

- **has a positive sense of ‘self-efficacy’ about the academic content area** (self-efficacy can be defined as the confidence that one can be successful in the academic discipline or subject matter if one puts forth reasonable effort)

<table>
<thead>
<tr>
<th>Area</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

- **displays some apparent intrinsic motivation to engage in course work** (e.g., is motivated by topics and subject matter discussed or covered in the course; finds the act of working on course assignments to be reinforcing in its own right)

<table>
<thead>
<tr>
<th>Area</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

- **displays apparent extrinsic motivation to engage in course work** (e.g., is motivated by grades, praise, public recognition of achievement, access to privileges such as sports eligibility, or other rewarding outcomes)

<table>
<thead>
<tr>
<th>Area</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

- **Other:** ______________

<table>
<thead>
<tr>
<th>Area</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Comments

__________________________

__________________________

__________________________

__________________________

__________________________

__________________________

__________________________

__________________________

### ‘Academic Enabler’ Skills: Sample Observational Checklists

**Teacher-Defined Academic Enabling Skill:**

**Skill Name:**

**Essential Subskills: The student:**

<table>
<thead>
<tr>
<th>Subskill</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Comments:**

---

**Notes:**

*Please fill in the observed skills and ratings accordingly.*
Activity: Academic Enablers
Observational Checklist

At your tables:

- Review the ‘Academic Enablers’ Observational Checklists.
- Discuss how your school might use the existing examples or use the general format to create your own observational checklists.
Classroom Data Collection

- **Behavioral Frequency Count/Behavioral Rate.** 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: (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.
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 8 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).
Classroom Data Collection

*Rating scales.* A scale is developed with one or more items that a rater can use to complete a global rating of a behavior. Often the rating scale is completed at the conclusion of a fixed observation period (e.g., after each class period; at the end of the school day).

NOTE: One widely used example of rating scales routinely used in classrooms is the daily behavior report (DBR). The teacher completes a 3- to 4-item rating scale each day evaluating various target student behaviors. A detailed description of DBRs appears on the next page, along with a sample DBR that assesses the student’s interactions with peers, compliance with adult requests, work completion, and attention to task.

www.interventioncentral.org
Monitoring Student Academic or General Behaviors: Daily Behavior Report Cards
Daily Behavior Report Cards (DBRCs) Are…

brief forms containing student behavior-rating items. The teacher typically rates the student daily (or even more frequently) on the DBRC. The results can be graphed to document student response to an intervention.
Daily Behavior Report Cards Can Monitor . . .

• Hyperactivity
• On-Task Behavior (Attention)
• Work Completion
• Organization Skills
• Compliance With Adult Requests
• Ability to Interact Appropriately With Peers
# Daily Behavior Report Card: Daily Version

**Math Class: Period 1**

<table>
<thead>
<tr>
<th>Student: Jim Blalock</th>
<th>Date: May 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher: Mrs. Williams</td>
<td>Classroom: Rm 108</td>
</tr>
</tbody>
</table>

**Directions:** Review each of the Behavior Report Card items below. For each item, rate the degree to which the student showed the behavior or met the behavior goal.

1. **Jim was prepared for class, with all necessary school materials (e.g., books, pencils, papers, calculator).**
   - Circle percentage of times the student showed this behavior out of total opportunities to engage in it:
     
     0%.....10%.....20%.....30%.....40%.....50%.....60%.....70%.....80%.....90%.....100%

2. **Jim completed and turned in his assigned class work on time.**
   - Circle the degree to which the student met the behavioral goal:
     
     1.....2.....3.....4....5.....6.....7.....8.....9
     Never/Seldom    Sometimes    Usually/Always

3. **Jim wrote down homework assignments correctly and completely.**
   - Did the student succeed in this behavioral goal?
     - [X] YES   [ ] NO
**Math Class: Period 1**

**Student:** Jim Blalock  
**Teacher:** Mrs. Williams  
**Classroom:** Rm 108

**Directions:** Review each of the Behavior Report Card items below. For each item, rate the degree to which the student showed the behavior or met the behavior goal.

<table>
<thead>
<tr>
<th>Behavioral Target</th>
<th>Date</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>Th</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jim was prepared for class, with all necessary school materials (e.g., books, pencils, papers, calculator).</strong></td>
<td>05/05/07</td>
<td>40%</td>
<td>0%</td>
<td>60%</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Write % of times the student showed this behavior... 0%...20%...40%...60%...80%...100%</td>
<td>05/06/07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jim completed and turned in his assigned class work on time.</strong></td>
<td>05/07/07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Select the degree to which the goal was met: 1...2...3...4...5...6...7...8...9  
Never/Seldom  
Sometimes  
Usually/Always | 05/08/07   |   |   |   |    |    |
| **Jim wrote down homework assignments correctly and completely** | 05/09/07   |   |   |   |    |    |
| Did the student succeed in this behavioral goal?  
□ YES  
□ NO | 05/09/07   |   |   |   |    |    |

www.interventioncentral.org
# Daily Behavior Report Card: Chart

## Behavior Rating Report Card Monitoring Chart for ________________

<table>
<thead>
<tr>
<th>Week of: _____</th>
<th>Week of: _____</th>
<th>Week of: _____</th>
<th>Week of: _____</th>
</tr>
</thead>
</table>

**Goal 1:** The student got along with others while showing socially appropriate behaviors.

<table>
<thead>
<tr>
<th>Usually/Always</th>
<th>Sometimes</th>
<th>Never/Seldom</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Week:** M T W Th F M T W Th F M T W Th F M T W Th F

**Goal 2:** The student completed class assignments on time, applying his/her best effort.

<table>
<thead>
<tr>
<th>Usually/Always</th>
<th>Sometimes</th>
<th>Never/Seldom</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Week:** M T W Th F M T W Th F M T W Th F M T W Th F

[www.interventioncentral.org](http://www.interventioncentral.org)
Rating Scales: Example

Example: All of the teachers on a 7th-grade instructional team decided to use a Daily Behavior Report to monitor classroom interventions for Brian, a student who presented challenges of inattention, incomplete work, and occasional non-compliance. They created a DBR with the following items:

- **Brian focused his attention on teacher instructions, classroom lessons and assigned work.**
- **Brian completed and turned in his assigned class work on time.**
- **Brian spoke respectfully and complied with adult requests without argument or complaint.**

Each rating item was rated using a 1-9 scale:

On average, Brian scored no higher than 3 (‘Never/Seldom’ range) on all rating items in all classrooms (baseline). The team set as an intervention goal that, by the end of a 6-week intervention to be used in all classrooms, Brian would be rated in the 7-9 range (‘Most/All of the Time’) in all classrooms.
Activity: Daily Behavior Report Card

At your tables:

- Discuss the Daily Behavior Report Card as a classroom monitoring tool.
- How could you use this tool directly or indirectly to measure aspect(s) of student academic concerns?
Classroom Data Collection

• **Academic Skills: Cumulative Mastery Log.** During academic interventions in which the student is presented with specific items such as math facts or spelling words, the instructor can track the impact of the intervention by recording and dating mastered items in a cumulative log.

• To collect baseline information, the instructor reviews all items from the academic-item set with the student, noting which items the student already knows. Then, throughout the intervention, the instructor logs and dates any additional items that the student masters.
Academic Skills: Cumulative Mastery Log:

Example

Example: Mrs. Ostrowski, a 1st-grade teacher, decides to provide additional intervention support for Jonah, a student in her class who does not have fluent letter recognition skills. Before starting an intervention, she inventories and records Jonah’s baseline skills— noting that Jonah can fluently and accurately recognize 18 upper-case letters and 14 lower-case letters from the English alphabet. She sets as an intervention goal that Jonah will master all remaining items—8 upper-case and 12 lower-case letters—within four weeks.

Mrs. Ostrowski then begins the daily intervention (incremental rehearsal of letters using flashcards). Whenever Jonah is able fluently and accurately to name a previously unknown letter, the teacher records and dates that item in her cumulative mastery log.
Classroom Data Collection

**Work Products.** Student work products can be collected and evaluated to judge whether the student is incorporating information taught in the course, applying cognitive strategies that they have been taught, or remediating academic delays. Examples of work products are math computation worksheets, journal entries, and written responses to end-of-chapter questions from the course textbook.

Whenever teachers collect academic performance data on a student, it is recommended that they also assess the performance of typical peers in the classroom. Work products can be assessed in several ways, depending on the identified student problem.
Work Products: Example

• Example: Mrs. Franchione, a social studies teacher, identified her eighth-grade student, Alexandria, as having difficulty with course content. The student was taught to use question generation as a strategy to better identify the main ideas in her course readings.

• Mrs. Franchione decided to assess Alexandria’s student journal entries. Each week, Mrs. Franchione assigned students 5 key vocabulary terms and directed them to answer a social studies essay question while incorporating all 5 terms. She also selected 3 typical students to serve as peer comparisons.

  Mrs. Franchione decided to assess Alexandria’s journal entries according to the following criteria:

  • Presence of weekly assigned vocabulary words in the student essay
  • Unambiguous, correct use of each assigned vocabulary term in context
  • Overall quality of the student essay on a scale of 1 (significantly below peers) to 4 (significantly above peers).
Response to Intervention

Work Products: Example (cont.)

• To establish a **baseline** before starting the intervention, Mrs. Franchione used the above criteria to evaluate the two most recent journal entries from Alexandria’s journal—and averaged the results: 4 of assigned 5 vocabulary terms used; 2 used correctly in context; essay quality rating of 1.5.

• Peer comparison: all 5 assigned vocabulary terms used; 4 used correctly in context; average quality rating of 3.2.

Mrs. Franchione set an **intervention goal** for Alexandria that—by the end of the 5-week intervention period—the student would regularly incorporate all five vocabulary terms into her weekly journal entries, that at least 4 of the five entries would be used correctly in context, and that the student would attain a quality rating score of 3.0 or better on the entries.
Activity: Work Products

At your tables:

• Review the form for assessing work products.
• Discuss how your school might be able to use this existing form or modify it to ‘standardize’ the collection and evaluation of student work products.
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.
Response to Intervention

Behavior Log: Example

- Example: Mrs. Roland, a 6th-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. She recorded instances when Bill’s behavior would escalate to become confrontational. 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.
Classroom Data Collection

**Curriculum-Based Measurement.** Curriculum-Based Measurement (CBM) is a family of brief, timed measures that assess basic academic skills. CBMs have been developed to assess phonemic awareness, oral reading fluency, number sense, math computation, spelling, written expression and other skills. Among advantages of using CBM for classroom assessment are that these measures are quick and efficient to administer; align with the curriculum of most schools; have good ‘technical adequacy’ as academic assessments; and use standard procedures to prepare materials, administer, and score (Hosp, Hosp & Howell, 2007).
Response to Intervention

**Description:**
Worksheet contains either single-skill or multiple-skill problems.

**CBM Math Computation**

**Administration:**
Can be administered to groups (e.g., whole class).
Students have 2 minutes to complete worksheet.

**Scoring:** Students get credit for each correct digit—a method that is more sensitive to short-term student gain.

---

**Curriculum-Based Assessment Mathematics**
Multiple-Skills Computation Probe: Student Copy

Date: _______________

<table>
<thead>
<tr>
<th>Operation</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 + 20</td>
<td>70</td>
</tr>
<tr>
<td>677 - 151</td>
<td>526</td>
</tr>
<tr>
<td>31 ∗ 21</td>
<td>651</td>
</tr>
<tr>
<td>71 + 26</td>
<td>97</td>
</tr>
</tbody>
</table>
Curriculum-Based Measurement: Advantages as a Set of Tools to Monitor RTI/Academic Cases

- **Aligns** with curriculum-goals and materials
- Is **reliable** and **valid** (has ‘technical adequacy’)
- Is **criterion-referenced**: sets specific performance levels for specific tasks
- Uses **standard procedures** to prepare materials, administer, and score
- Samples student performance to give objective, observable ‘low-inference’ information about student performance
- Has **decision rules** to help educators to interpret student data and make appropriate instructional decisions
- Is **efficient** to implement in schools (e.g., training can be done quickly; the measures are brief and feasible for classrooms, etc.)
- Provides data that can be converted into **visual displays** for ease of communication

Among other areas, CBM Techniques have been developed to assess:

- Reading fluency
- Reading comprehension
- Math computation
- Writing
- Spelling
- Phonemic awareness skills
- Early math skills
Example: Mr. Jackson, a 3rd-grade teacher, decided to use explicit time drills to help his student, Andy, become more fluent in his multiplication math facts. Prior to starting the intervention, Mr. Jackson administered a CBM math computation probe (single-skill probe; multiplication facts from 0 to 12) on three consecutive days. Mr. Jackson used the median, or middle, score from these three assessments as baseline—finding that the student was able to compute an average of 20 correct digits in two minutes. He also set a goal that Andy would increase his computation fluency on multiplication facts by 3 digits per week across the 5-week intervention, resulting in an intervention goal of 35 correct digits.
Combining Classroom Monitoring Methods

- Often, methods of classroom data collection and progress-monitoring can be combined to track a single student problem.

- Example: A teacher can use a rubric (checklist) to rate the quality of student work samples.

- Example: A teacher may keep a running tally (behavioral frequency count) of student callouts. At the same time, the student may be self-monitoring his rate of callouts on a Daily Behavior Report Card (rating scale).
Activity: 1 Classroom Methods of Data Collection

In your teams:

- Select one of the methods of data collection discussed in this section of the workshop that you are most interested in using to evaluate student progress.

- Discuss how you might use this data source to monitor student progress in your classroom. How would you use it to calculate baseline, set goals, and how frequently would you monitor student progress?

Classroom Data Sources:

- Existing data
- Global skill checklist
- Behavioral frequency count/behavior rate
- Rating scales
- Academic skills:
  - Cumulative mastery log
- Work products
- Behavior log
- Curriculum-based measurement
Activity: Classroom Methods of Data Collection

At your table: Review the key resources and ideas covered in this workshop:

- Writing clear, specific problem-identification statements for academic and behavioral concerns.
- Structuring any classroom student data collection to include baseline, goal, progress-monitoring.
- Learning about free online resources for data collection.

What ideas do you have for sharing these ideas back at your school and/or changing your school practice to support their use?
Setting Up Effective Classroom Data Collection
The Structure of Data Collection

- Teachers can use a wide variety of methods to assess student academic performance or behavior.
- However, data collection should be structured to include these elements: baseline, the setting of a goal for improvement, and regular progress-monitoring.
- The structure of data collection can be thought of as a glass into which a wide variety of data can be ‘poured’.
Classroom Data Collection Methods: Examples

- Existing data
- Global skill checklist
- Behavioral frequency count/behavior rate
- Rating scales
- Academic skills: Cumulative mastery log
- Work products
- Behavior log
- Curriculum-based measurement
# RTI Classroom Progress-Monitoring Worksheet

**Student:**

**Teacher:**

**Classroom or Course:**

## A. Identify the Student Problem
Describe in clear, specific terms the student academic or behavioral problem:

## B. Select a Data Collection Method
Choose a method of data collection to measure whether the classroom intervention actually improves the identified student problem (e.g., curriculum-based measurement, etc.).

How frequently will this data be collected? _____ times per _____

## C. Collect Data to Calculate Baseline
What method from the choices below will be used to estimate the student’s baseline (starting) performance? (Note: Generally, at least 3-5 baseline data points are recommended.)

- From a total of _____ observations, select the median value.
- Other: _____

From a total of _____ observations, calculate the mean value.

<table>
<thead>
<tr>
<th>Baseline</th>
<th>3. Date: _____ Obsv: _____</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>2. Date: _____ Obsv: _____</td>
<td></td>
</tr>
</tbody>
</table>

Baseline Performance: Based on the method selected above, it is calculated that the student’s baseline performance is:

## D. Determine Intervention Timespan
The intervention will last _____ instructional weeks and end on _____/_____.

## E. Set a Performance Goal
What goal is the student expected to achieve if the intervention is successful? At the end of the intervention, it is predicted that the student will reach this performance goal.

## F. Decide How Student Progress is to Be Summarized
Select a method for summarizing student progress (outcome) attained when the intervention ends. Student progress at the end of the intervention is to be summarized by:

- Selecting the median value from the final _____ data-points (e.g., 3).
- Computing the mean value from the final _____ data-points (e.g., 3).
- [For time-series graphs]: Calculating the value on the graph trend line at the point that it intersects the intervention end date.

<table>
<thead>
<tr>
<th>Progress-Monitoring</th>
<th>5. Date: _____ Obsv: _____</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>2. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>3. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>4. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>6. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>7. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>8. Date: _____ Obsv: _____</td>
<td></td>
</tr>
<tr>
<td>9. Date: _____ Obsv: _____</td>
<td></td>
</tr>
</tbody>
</table>
A. Identify the Student Problem: Describe in clear, specific terms the student academic or behavioral problem:

________________________________________________________________________

B. Select a Data Collection Method: Choose a method of data collection to measure whether the classroom intervention actually improves the identified student problem (e.g., curriculum-based measurement, etc.).

________________________________________________________________________

How frequently will this data be collected?: __________ times per _____________
C. Collect Data to Calculate Baseline: What method from the choices below will be used to estimate the student’s baseline (starting) performance? (NOTE: Generally, at least 3-5 baseline data points are recommended.)

- From a total of _____ observations, select the **median** value.
- From a total of _____ observations, calculate the **mean** value.
- Other: ________________________________

<table>
<thead>
<tr>
<th>Baseline</th>
<th>3. Date: <em><strong>/</strong></em>/___ Obsv: __________</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
<td>4. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
</tr>
<tr>
<td>2. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
<td>5. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
</tr>
</tbody>
</table>

Baseline Performance: Based on the method selected above, it is calculated that the student’s baseline performance is: ________________________________
Baseline: Defining the Student Starting Point

- Baseline data provide the teacher with a snapshot of the student’s academic skills or behavior before the intervention begins.
- An estimate of baseline is essential in order to measure at the end of the intervention whether the student made significant progress.
- Three to five data-points are often recommended—because student behavior can be variable from day to day.
Baseline: Using the Median Score
If several data points are collected, the middle, or median, score can be used to estimate student performance. Selecting the median can be a good idea when student data is quite variable.

<table>
<thead>
<tr>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date: <strong>2</strong>/<strong>3</strong>/10___ Obsv: <em><strong>13</strong></em>_</td>
</tr>
<tr>
<td>2. Date: <strong>2</strong>/<strong>5</strong>/10___ Obsv: <em><strong>15</strong></em>_</td>
</tr>
<tr>
<td>3. Date: <strong>2</strong>/<strong>6</strong>/10___ Obsv: <em><strong>11</strong></em>_</td>
</tr>
<tr>
<td>4. Date: <em><strong>/</strong></em>/___ Obsv: _____________</td>
</tr>
<tr>
<td>5. Date: <em><strong>/</strong></em>/___ Obsv: _____________</td>
</tr>
</tbody>
</table>
Baseline: Using the Mean Score

If several data points are collected, an average, or mean, score can be calculated by adding up all baseline data and dividing by the number of data points.

<table>
<thead>
<tr>
<th>Baseline</th>
<th>13+15+11=39</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date: <strong>2</strong>/<strong>3</strong>/<strong>10</strong>_ Obsv: <em><strong>13</strong></em></td>
<td></td>
</tr>
<tr>
<td>2. Date: <strong>2</strong>/<strong>5</strong>/<strong>10</strong>_ Obsv: <em><strong>15</strong></em></td>
<td></td>
</tr>
<tr>
<td>3. Date: <strong>2</strong>/<strong>6</strong>/<strong>10</strong>_ Obsv: <em><strong>11</strong></em></td>
<td></td>
</tr>
<tr>
<td>4. Date: <strong><strong>/</strong></strong>/____ Obsv: ____________</td>
<td></td>
</tr>
<tr>
<td>5. Date: <strong><strong>/</strong></strong>/____ Obsv: ____________</td>
<td></td>
</tr>
</tbody>
</table>

39 divided by 3 = 13
Mean = 13
D. Determine Intervention Timespan: The intervention will last _____ instructional weeks and end on ___/___/____.

E. Set a Performance Goal: What goal is the student expected to achieve if the intervention is successful?
   At the end of the intervention, it is predicted that the student will reach this performance goal:
   
F. Decide How Student Progress is to Be Summarized: Select a method for summarizing student progress ('outcome') attained when the intervention ends. Student progress at the end of the intervention is to be summarized by:
   - Selecting the **median** value from the final ____ data-points (e.g., 3).
   - Computing the **mean** value from the final ____ data-points (e.g., 3).
   - [For time-series graphs]: Calculating the **value on the graph trend line** at the point that it intercepts the intervention end date.

G. Evaluate the Intervention Outcome:
   At the end of the intervention, compare student progress to goal. If actual progress meets or exceeds goal, the intervention is judged successful.
   
   The student’s ACTUAL Progress (Step F) is:
   
   The PERFORMANCE GOAL for improvement (Step E) is:
   
<table>
<thead>
<tr>
<th>Progress-Monitoring</th>
<th>5. Date: <em><strong>/</strong></em>/___ Obsv: __________</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
<td>6. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
</tr>
<tr>
<td>2. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
<td>7. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
</tr>
<tr>
<td>3. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
<td>8. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
</tr>
<tr>
<td>4. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
<td>9. Date: <em><strong>/</strong></em>/___ Obsv: __________</td>
</tr>
</tbody>
</table>
D. Determine Intervention Timespan: The intervention will last ______ instructional weeks and end on ____/____/____.

Intervention ‘Timespan’: How Long is Long Enough?

Any intervention should be allowed sufficient time to demonstrate whether it is effective. The limitation on how quickly an intervention can be determined to be ‘effective’ is usually the sensitivity of the measurement tools. As a rule, behavioral interventions tend to show effects more quickly than academic interventions—because academic skills take time to increase, while behavioral change can be quite rapid.

A good rule of thumb for classroom interventions is to allow 4-8 instructional weeks to judge the intervention.
E. Set a Performance Goal: What goal is the student expected to achieve if the intervention is successful? At the end of the intervention, it is predicted that the student will reach this performance goal:

Performance Goal

The outcome goal for an intervention can be estimated in several ways:

- If there are research academic norms or local norms available (e.g., DIBELS), these can be useful to set a goal criterion.
- The teacher can screen a classroom to determine average performance.
- The teacher can select 3-4 ‘typical’ students in the class, administer an academic measure (e.g., curriculum-based measurement writing) to calculate a ‘micro-norm’.
- The teacher can rely on ‘expert opinion’ of what is a typical level of student performance.
## End of Grade 1

Table 11  
*Descriptive Levels of Performance in End of First Grade*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBELS Phoneme Segmentation Fluency</td>
<td>PSF &lt; 10</td>
<td>Deficit</td>
</tr>
<tr>
<td></td>
<td>10 &lt;= PSF &lt; 35</td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>PSF &gt;= 35</td>
<td>Established</td>
</tr>
<tr>
<td>DIBELS Nonsense Word Fluency</td>
<td>NWF &lt; 30</td>
<td>Deficit</td>
</tr>
<tr>
<td></td>
<td>30 &lt;= NWF &lt; 50</td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>NWF &gt;= 50</td>
<td>Established</td>
</tr>
<tr>
<td>DIBELS Oral Reading Fluency</td>
<td>DORF &lt; 20</td>
<td>At Risk</td>
</tr>
<tr>
<td></td>
<td>20 &lt;= DORF &lt; 40</td>
<td>Some Risk</td>
</tr>
<tr>
<td></td>
<td>DORF &gt;= 40</td>
<td>Low Risk</td>
</tr>
</tbody>
</table>

F. Decide How Student Progress is to Be Summarized: Select a method for summarizing student progress ('outcome') attained when the intervention ends. Student progress at the end of the intervention is to be summarized by:

- Selecting the median value from the final ____ data-points (e.g., 3).

- Computing the mean value from the final ____ data-points (e.g., 3).

- [For time-series graphs]: Calculating the value on the graph trend line at the point that it intercepts the intervention end date.
G. Evaluate the Intervention Outcome:

At the end of the intervention, compare student progress to goal. If actual progress meets or exceeds goal, the intervention is judged successful.

<table>
<thead>
<tr>
<th>The student’s ACTUAL Progress (Step F) is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PERFORMANCE GOAL for improvement (Step E) is:</td>
</tr>
</tbody>
</table>
Response to Intervention

Team Activity: Structuring Student Data Collection

At your tables:

• Talk about ways that you routinely collect data in your classrooms.

• Discuss how you can use the ‘structuring student data collection’ framework presented in this workshop for different kinds of classroom data.

• Be prepared to report out on your discussion.