How to Collect RTI Data in the General-Education Classroom

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Workshop PPTs and handout available at:

http://www.interventioncentral.org/swboces

Workshop Agenda

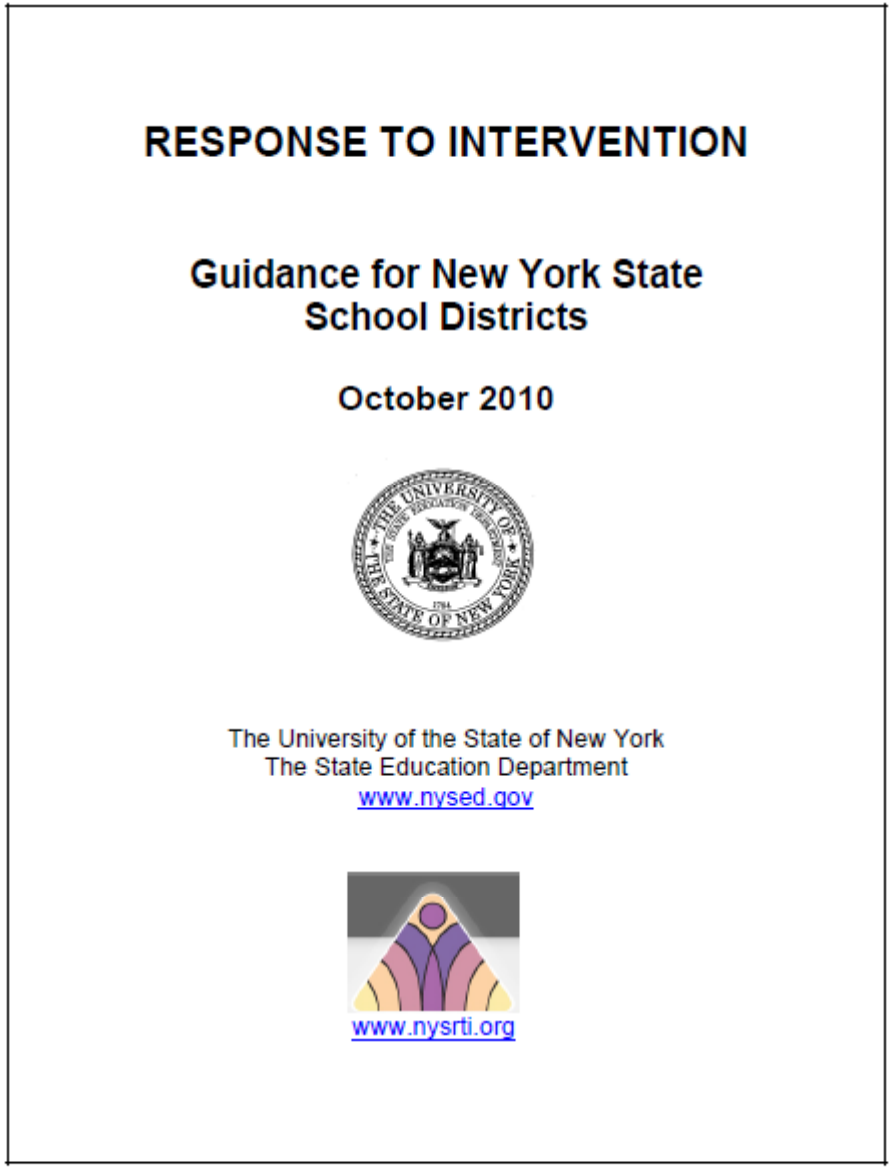
- Writing Clear, Specific Student Academic & Behavioral Problem Identification Statements
- Structuring Intervention Data Collection to Include Baseline, Goal, Regular Progress-Monitoring
- Review of Classroom-Friendly Methods of Progress-Monitoring
- Planning Your School's or District's 'Next Steps' in Using Screening and Progress-Monitoring Tools

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.

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

NYSED RTI Guidance Document: October 2010



RESPONSE TO INTERVENTION

Guidance for New York State School Districts

October 2010

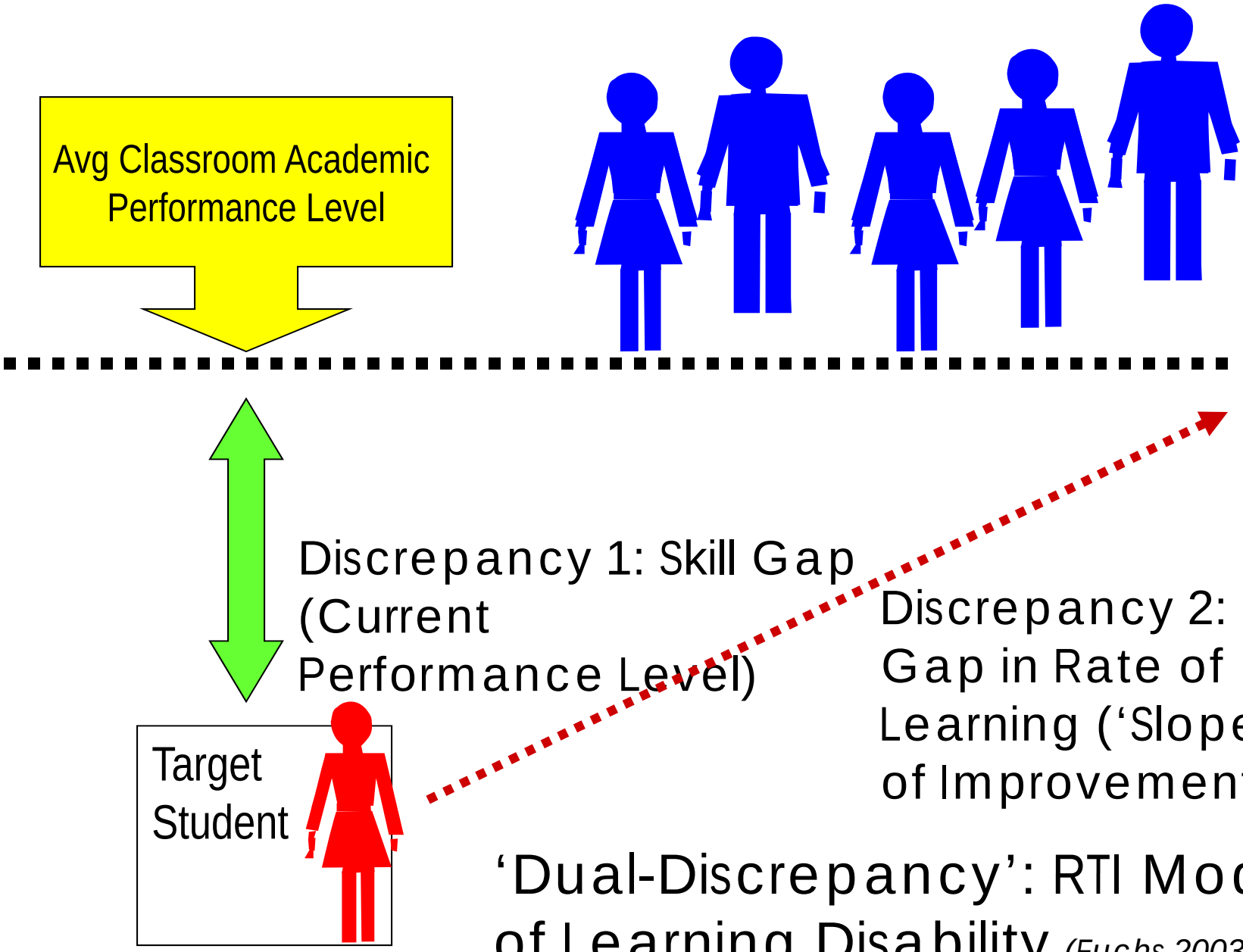
The University of the State of New York
The State Education Department
www.nysed.gov

www.nysrti.org

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf

Progress monitoring is the practice of assessing student performance using assessments on a repeated basis to determine how well a student is responding to instruction. Data obtained from progress monitoring helps staff to determine the extent to which students are benefiting from classroom instruction and informs decisions about appropriate levels of intervention.

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf; p. 19



'Dual-Discrepancy': RTI Model of Learning Disability *(Fuchs 2003)*

Tier 1: The Key Role of Classroom Teachers in RTI

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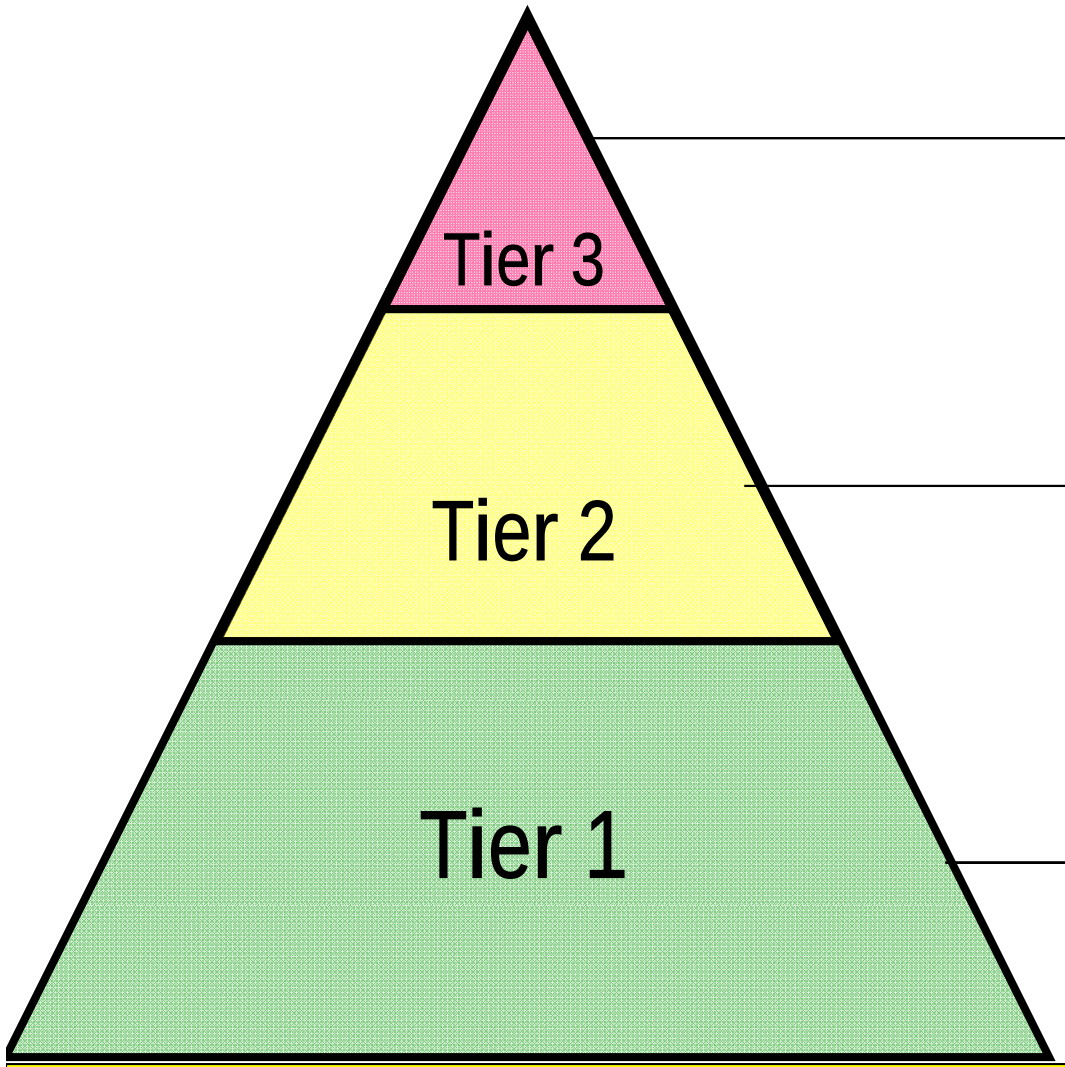
RTI 'Pyramid of Interventions'



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

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

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

Tier 1 is commonly identified as the core instructional program provided to all students by the general education teacher in the general education classroom. Research-based instruction and positive behavior intervention and supports are part of the core program. A school/district's core program (Tier 1) should minimally include:

- core curriculum aligned to the NYS learning standards;
- appropriate instruction and research-based instructional interventions that meets the needs of at least 80 percent of all learners;
- universal screening administered to all students in the general education classroom three times per year;
- weekly progress monitoring of students initially identified as at-risk for five or six weeks;
- differentiated instruction based on the abilities and needs of all students in the core program; and
- a daily uninterrupted 90 minute block of instruction in reading.

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf; p. 12

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 Role of Classroom Teachers as 'Interventionists' in RTI: 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.

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

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.

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

Defining the Student Problem

Focus of Inquiry: How can a general-education teacher quickly and specifically describe a student academic or behavioral concern—and link that definition to a probable cause?

"If you can't name a problem, you can't track it and you can't fix it."

Activity: Select a Struggling Student

- Select a student in your class or school who is currently struggling for academic and/or behavioral reasons.
- Discuss this student with your elbow group.
- Write a 'problem-identification' statement that describes the student's academic or behavioral concern.

Defining Student Problems: The First Step in Effective Intervention Planning

It may surprise educators to learn that the problem-identification step is the most critical for matching the student to an effective intervention (Bergan, 1995). Problem identification statements should be defined in clear and specific terms sufficient to pass 'the stranger test' (Howell, Hosp, & Kurns, 2008): the student problem can be judged as adequately defined if a third party equipped only with the problem-identification statement can observe the student in the academic setting and know with confidence when the problem behavior is displayed and when it is not.

pp. 36-39

Defining Student Problems: The First Step in Effective Intervention Planning (Cont.)

Here is a 3-step process for describing student problems clearly, understanding their likely causes, and matching those problems to appropriate interventions.

1. **Describe the problem in specific terms** (Batsche et al., 2008; Upah, 2008). Write a clear, brief description of the academic skill or performance deficit or behavioral problem.

Defining Student Problems: The First Step in Effective Intervention Planning (Cont.)

Academic Problem Identification. An academic problem ID statement contains these 3 elements:

- *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.

Academic Problems: Sample Definitions		
Environmental Conditions or Task Demands. *'What is the student supposed to do?'*	**Problem Description.** *'What does the student actually do?'*	**Typical or Expected Level of Performance.** *'What is the performance that you expect from this student?'*
When completing a beginning-level algebra word problem…	…Ann is unable to translate that word problem into an equation with variables…	…while most peers in her class have mastered this skill.
During social studies large-group instruction…	…Franklin attends to instruction an average of 45% of the time…	… while peers in the same room attend to instruction an average of 85% of the time.
For science - homework…	… Tye turns in assignments an average of 50% of the time…	… while the classroom median rate of homework turned in is 90%.
On weekly 30-minute in-class writing assignments…	… Angela produces compositions that average 145 words…	…while a sampling of peer compositions shows that the typical student writes an average of 254 words.

Defining Student Problems: The First Step in Effective Intervention Planning (Cont.)

Behavior Problem Identification. A behavioral problem ID statement defines the problem behavior in clear, observable, measurable terms (Batsche et al., 2008; Upah, 2008) and avoids vague problem identification statements such as "The student is disruptive." A useful self-prompt to come up with a more detailed description of the problem is to ask, "What does <problem behavior> look like in the classroom?"

Defining Student Problems: The First Step in Effective Intervention Planning (Cont.)

A behavior problem ID statement contains these three elements:

- *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.

Behavior Problems: Sample Definitions		
Conditions. *'Where or when does the problem behavior occur and what is going on at the time?'*	**Problem Description.** *'What does the behavior look like in the classroom?'*	**Contextual Information About Frequency, Intensity, Duration, or Other Dimension(s) of the Behavior.** *'What indicates that this behavior is challenging?'*
During 20-minute independent seatwork literacy tasks,…	…John talks with peers about non-instructional topics…	…and must be redirected by the teacher an average of 3 times per session.
In school settings such as the playground or gymnasium, when unsupervised by adults,…	…Andrea is reported by peers to use physically threatening language…	…at least once per week.
When given a verbal teacher request…	…Jay fails to comply with that request within 3 minutes…	… an average of 50% of the time.

Defining Student Problems: The First Step in Effective Intervention Planning (Cont.)

2. **Select a hypothesis to explain the academic or behavioral problem.** The hypothesis states the assumed reason(s) or cause(s) for the student's academic or behavioral problem(s). Once it has been developed, the hypothesis statement acts like a compass needle, pointing toward interventions that most logically address the student concerns.

Likely Reason(s) for Student Academic and Behavioral Concerns	
Behavioral	**Academic**
❑ Lacks necessary behavioral skills ❑ Has the necessary behavioral skills but is not motivated by the instructional task/setting to comply/behave appropriately ❑ Seeks att'n from adults ❑ Seeks att'n from peers ❑ Reacts to teasing/bullying ❑ Tries to escape from instructional demands or setting ❑ Attempts to hide academic deficits through noncompliance or other misbehavior	❑ Is placed in work that is too difficult ❑ Lacks one or more crucial basic skills in the problem subject area(s) ❑ Needs drill & practice to strengthen and become more fluent in basic academic skills ❑ Has the necessary academic skills, fails to use them in the appropriate settings/situations ❑ Needs explicit guidance to connect current skills to new instructional demands ❑ Has the necessary academic skills but is not motivated by the instructional task/setting to actually do the work

Defining Student Problems: The First Step in Effective Intervention Planning (Cont.)

3. **Select interventions to match the selected hypothesis.** After a 'best guess', or hypothesis, has been selected to explain the probable cause of the student's academic or behavioral concern, the teacher will then choose intervention ideas that logically address the root cause of the problem.

Activity: Write Your Own Problem-ID Statement

- Write an academic or behavioral problem identification statement for at least one of the students selected by your team in the earlier exercise.
- TIP: Use the *Tier 1 Problem-Identification Worksheet* to guide you in writing your problem-ID statement.

Tier 1 Problem-Identification Worksheet

Directions: Use this sheet to define the student's academic or behavioral problem(s) that you would like to discuss in a meeting with a consultant. For each identified problem, select one or more hypotheses/explanations for why the problem is occurring.

Academic Problems: Format for Writing Problem Definition Statement		
Environmental Conditions or Task Demands	**Problem Description**	**Typical/ Expected Level of Performance**
Example: On grade 7 reading passages…	… Angela reads an average of 42 correct words per minute…	… while a typical student is able to read 168 words per minute.

Behavioral Problems: Format for Writing Problem Definition Statement		
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**
Example: When given a verbal teacher request…	…Jay fails to comply with that request within 3 minutes…	… an average of 50% of the time.

Likely Reason(s) for Student Concerns: Select up to 3 choices

Behavioral

- ☐ Lacks necessary behavioral skills
- ☐ Has the necessary behavioral skills but is not motivated by the instructional task/setting to comply/behave appropriately
- ☐ Seeks att'n from adults
- ☐ Seeks att'n from peers
- ☐ Reacts to teasing/bullying
- ☐ Tries to escape from instructional demands or setting
- ☐ Attempts to hide academic deficits through noncompliance or other misbehavior
- ☐ _____

Academic

- ☐ Is placed in work that is too difficult
- ☐ Lacks one or more crucial basic skills in the problem subject area(s)
- ☐ Needs drill & practice to strengthen and become more fluent in basic academic skills
- ☐ Has the necessary academic skills, fails to use them in the appropriate settings/situations
- ☐ Needs explicit guidance to connect current skills to new instructional demands
- ☐ Has the necessary academic skills but is not motivated by the instructional task/setting to actually do the work
- ☐ _____

References

- Batsche, G. M., Castillo, J. M., Dixon, D. N., & Forde, S. (2008). Best practices in designing, implementing, and evaluating quality interventions. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 177-193). Bethesda, MD: National Association of School Psychologists.
- Bergan, J. R. (1995). Evolution of a problem-solving model of consultation. *Journal of Educational and Psychological Consultation, 6(2),* 111-123.
- Foorman, B. R., & Torgesen, J. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research & Practice, 16,* 203-212.
- Howell, K. W., Hosp, J. L., & Kurns, S. (2008). Best practices in curriculum-based evaluation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp.349-362). Bethesda, MD: National Association of School Psychologists.
- Upah, K. R. F. (2008). Best practices in designing, implementing, and evaluating quality interventions. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 209-223). Bethesda, MD: National Association of School Psychologists.

Methods of Classroom Data Collection

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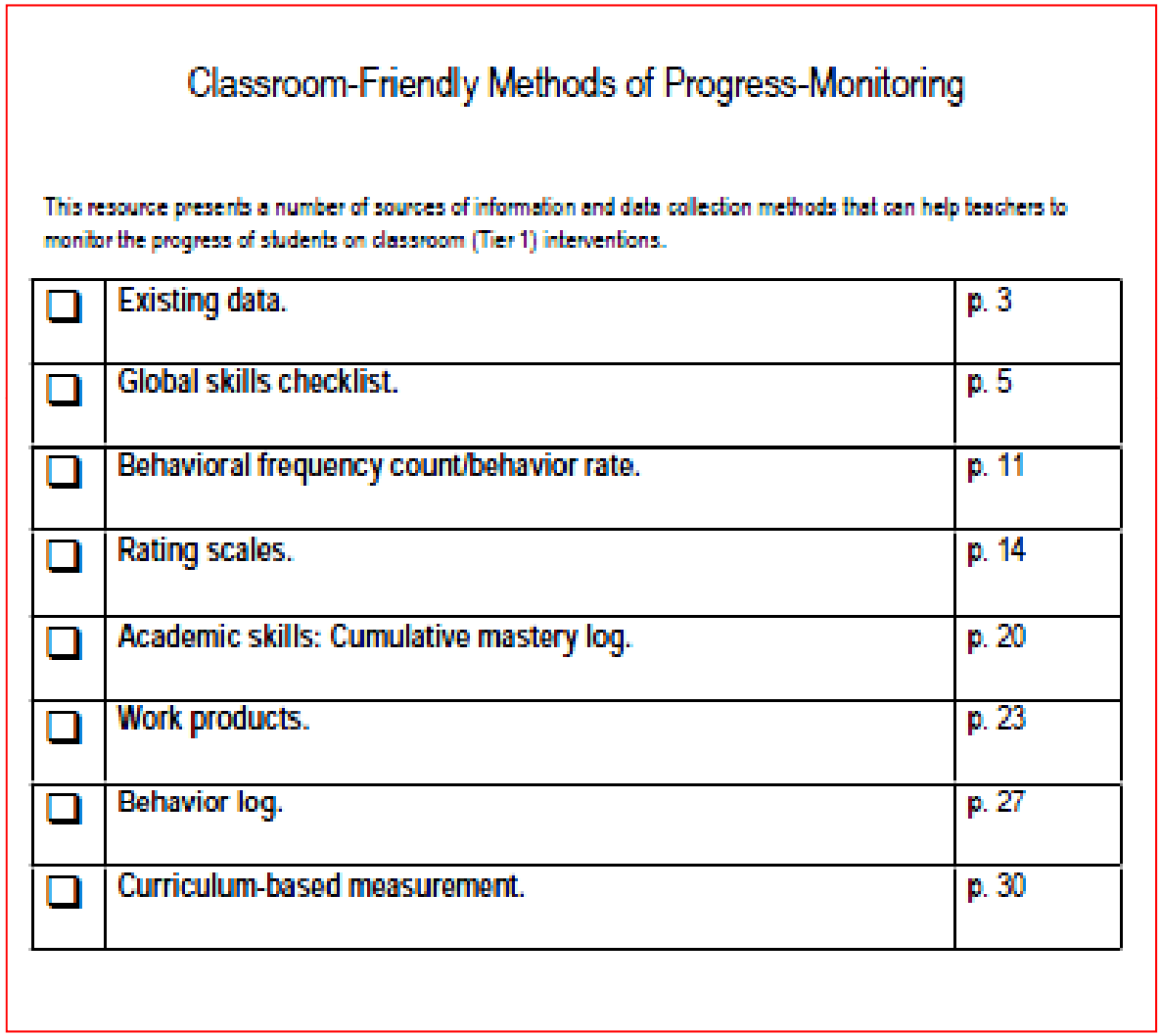
The use of informal assessments during the course of instruction can provide teachers with additional information on which to base instructional decisions. A combination of CBMs and informal, ongoing assessments (checklists, reading inventories, running records) completed by teachers to monitor progress are recommended so that use of CBM is not the sole index of progress, which could lead to unintended consequences such as children being fast and accurate in word reading, but inattentive to the meaning of what is read.

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf; p. 20



Classroom-Friendly Methods of Progress-Monitoring

This resource presents a number of sources of information and data collection methods that can help teachers to monitor the progress of students on classroom (Tier 1) interventions.

p. 2

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 skills 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. Havernick 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. Havernick 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

Source: DiPerna, J. C. (2006). Academic enablers and student achievement: Implications for assessment and intervention services in the schools. *Psychology in the Schools, 43*, 7-17.

‘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.

Source: Kazdin, A. E. (1989). *Behavior modification in applied settings* (4th ed.). Pacific Gove, CA: Brooks/Cole.

'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.

Source: Kazdin, A. E. (1989). *Behavior modification in applied settings* (4th ed.). Pacific Gove, CA: Brooks/Cole.

'Academic Enabler' Skills: Sample Observational Checklists

Study Skills. The student:				
❑ takes complete, organized class notes in legible form and maintains them in one accessible note book	Poor 1	Fair 2	Good 3	NA _
❑ reviews class notes frequently (e.g., after each class) to ensure understanding	Poor 1	Fair 2	Good 3	NA _
❑ When reviewing notes, uses highlighters, margin notes, or other strategies to note questions or areas of confusion for later review with teacher or tutor	Poor 1	Fair 2	Good 3	NA _
❑ follows an efficient strategy to study for tests and quizzes	Poor 1	Fair 2	Good 3	NA _
❑ allocates enough time to study for tests and quizzes	Poor 1	Fair 2	Good 3	NA _
❑ is willing to seek help from the teacher to answer questions or clear up areas of confusion	Poor 1	Fair 2	Good 3	NA _
❑ Other: _____				
Comments: _____ _____				

'Academic Enabler' Skills: Sample Observational Checklists

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

'Academic Enabler' Skills: Sample Observational Checklists

Homework Completion. The student:				
❑ writes down homework assignments accurately and completely	Poor 1	Fair 2	Good 3	NA _
❑ makes use of available time in school (e.g., study halls, homeroom) to work on homework	Poor 1	Fair 2	Good 3	NA _
❑ has an organized, non-distracting workspace available at home to do homework	Poor 1	Fair 2	Good 3	NA _
❑ 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)	Poor 1	Fair 2	Good 3	NA _
❑ when completing homework, uses highlighters, margin notes, or other strategies to note questions or areas of confusion for later review with teacher or tutor	Poor 1	Fair 2	Good 3	NA _
❑ turns in homework on time	Poor 1	Fair 2	Good 3	NA _
❑ Other: _____	Poor 1	Fair 2	Good 3	NA _
Comments: _____ _____				

'Academic Enabler' Skills: Sample Observational Checklists

Cooperative Learning Skills. The student:				
❑ participates in class discussion	Poor 1	Fair 2	Good 3	NA _
❑ gets along with others during group/pair activities	Poor 1	Fair 2	Good 3	NA _
❑ participates fully in group/pair activities	Poor 1	Fair 2	Good 3	NA _
❑ does his or her 'fair share' of work during group/pair activities	Poor 1	Fair 2	Good 3	NA _
❑ is willing to take a leadership position during group/pair activities	Poor 1	Fair 2	Good 3	NA _
❑ Other: _____	Poor 1	Fair 2	Good 3	NA _
Comments: _____ _____				

'Academic Enabler' Skills: Sample Observational Checklists

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

‘Academic Enabler’ Skills: Sample Observational Checklists

Teacher-Defined Academic Enabling Skill:

Skill Name: _____

Essential Subskills: The student::

❑ _____	Poor 1 Fair 2 Good 3 NA –
❑ _____	Poor 1 Fair 2 Good 3 NA –
❑ _____	Poor 1 Fair 2 Good 3 NA –
❑ _____	Poor 1 Fair 2 Good 3 NA
❑ _____	Poor 1 Fair 2 Good 3 NA

Comments:

_____

_____

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.

Behavioral Frequency Count/Behavioral Rate: Example

- 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.

Monitoring Student Academic or General Behaviors: Behavior Report Cards

Behavior Report Cards (BRCs) Are…

brief forms containing student behavior-rating items. The teacher typically rates the student daily (or even more frequently) on the BRC. The results can be graphed to document student response to an intervention.

Behavior Report Cards Can Monitor Many Behaviors, Including…

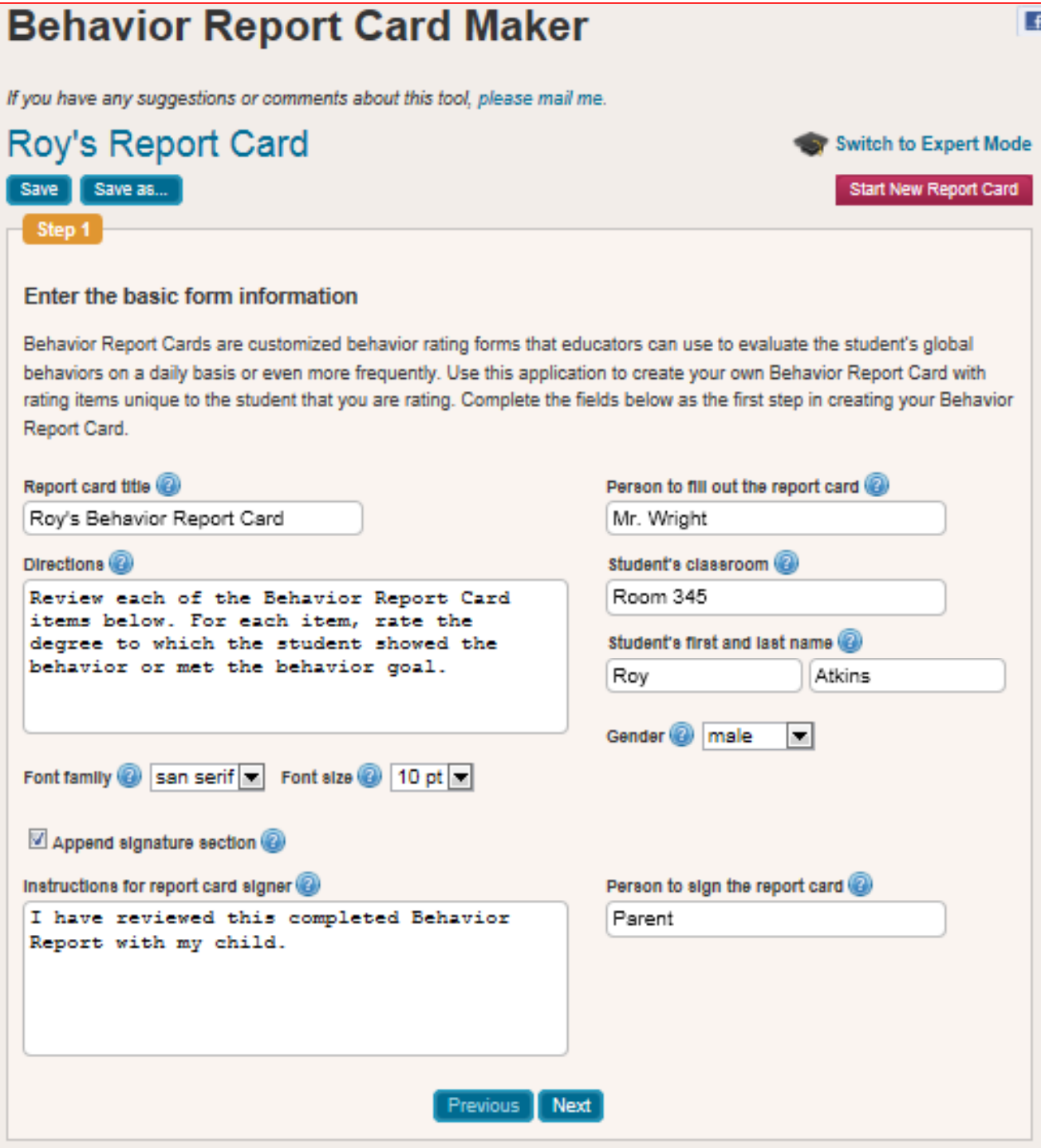
- Hyperactivity
- On-Task Behavior (Attention)
- Work Completion
- Organization Skills
- Compliance With Adult Requests
- Ability to Interact Appropriately With Peers

Behavior Report Card Generator

- Helps teachers to define student problem(s) more clearly.
- Reframes student concern(s) as replacement behaviors, to increase the likelihood for success with the academic or behavioral intervention.
- Provides a fixed response format each day to increase the consistency of feedback about the teacher's concern(s).
- Can serve as a vehicle to engage other important players (student and parent) in defining the problem(s), monitoring progress, and implementing interventions.

Behavior Report Card Maker

www.interventioncentral.org



Behavior Report Card Maker

www.interventioncentral.org

Example: Daily Report Card

Jim's Report Card

Student Name: Brian Date: _____

Rater: Mr. Wright Classroom: Classroom 345

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.

Brian spoke respectfully and complied within 1 minute with adult requests without argument or complaint.

The degree to which Brian met this behavior goal

☹ 1 😐 2 ☺ 3

Brian sat in class without fidgeting or squirming more than most peers.

How well Brian did in meeting the behavior goal

1.....2.....3

Poor Fair Good

Brian turned in his completed homework on time.

Did Brian succeed in this behavior goal?

❑ YES ❑ NO

Brian went to the nurse only when needed.

How well Brian did in meeting the behavior goal

1.....2.....3

Poor Fair Good

Brian spoke respectfully and complied within 1 minute with adult requests without argument or complaint.

How well Brian did in meeting the behavior goal

1.....2.....3

Poor Fair Good

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 items 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 Behavior Report Card as a classroom monitoring tool.
- What use(s) could you find for such a measurement tool?
- How would you share this tool with others in your school?

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).

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.

Classroom Data Collection

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.

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.

Behavior Log: Example (cont.)

- 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).

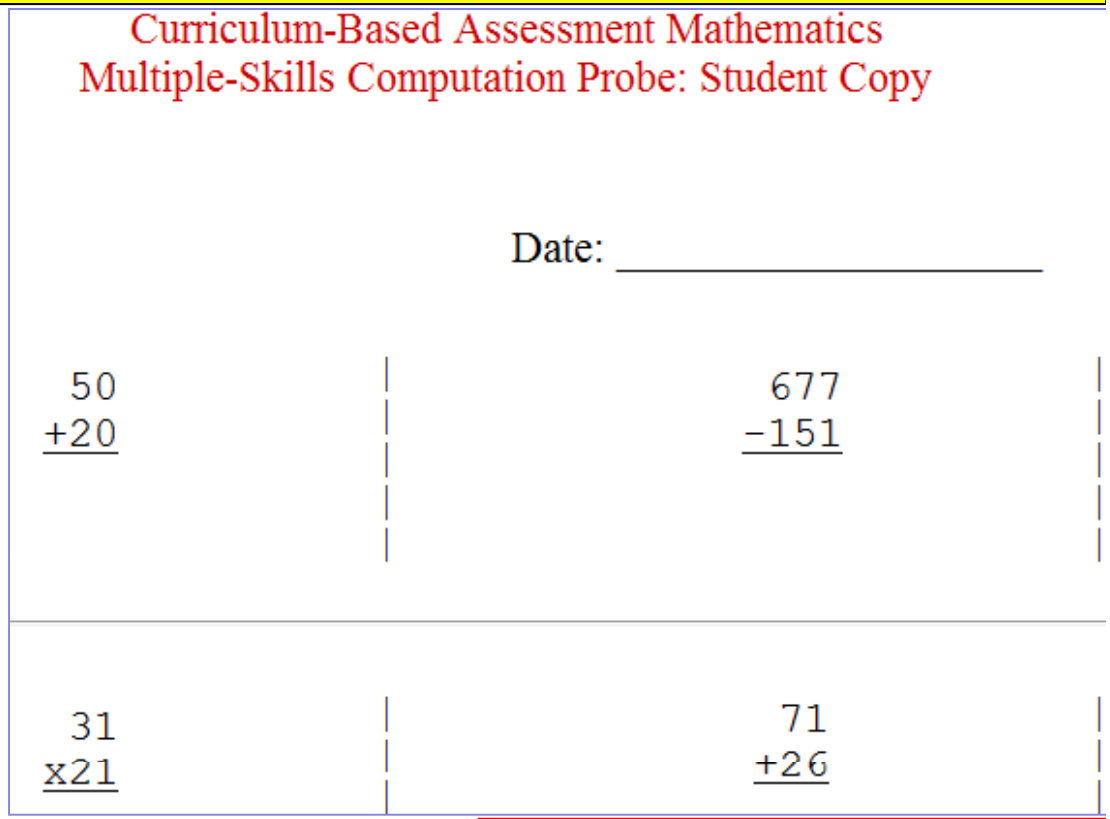
The assessment tools selected for progress monitoring should be specific to the skills being measured. CBMs are a frequently used tool for progress monitoring. For example, in reading, an appropriate progress monitoring tool would target the specific essential element(s) of reading with which an individual student is having difficulty, such as phonemic awareness, phonics, fluency, vocabulary and/or comprehension.

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf; p. 20

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.



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

Date: _____

50 +20	677 −151
31 x21	71 +26

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

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

Source: Hosp, M.K., Hosp, J. L., & Howell, K. W. (2007). *The ABCs of CBM*. New York: Guilford.

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

- Reading fluency
- Reading comprehension
- Math computation
- Writing
- Spelling
- Phonemic awareness skills
- Early math skills

Curriculum-Based Measurement: Example

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).

"…One way I have used the Maze in the past at the secondary level, is as a targeted screener to determine an instructional match between the student and the text materials. By screening all students on one to three Maze samples from the text and/or books that were planned for the course, we could find the students who could not handle the materials without support (study guides, highlighted texts, alternative reading material). …This assessment is efficient and it seems quite reliable in identifying the potential underachievers, achievers, and overachievers. The real pay back is that success can be built into the courses from the beginning, by providing learning materials and supports at the students' instructional levels."

Lynn Pennington, Executive Director, SSTAGE

(Student Support Team Association for Georgia Educators)

Activity: 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 having your school adopt or improve.

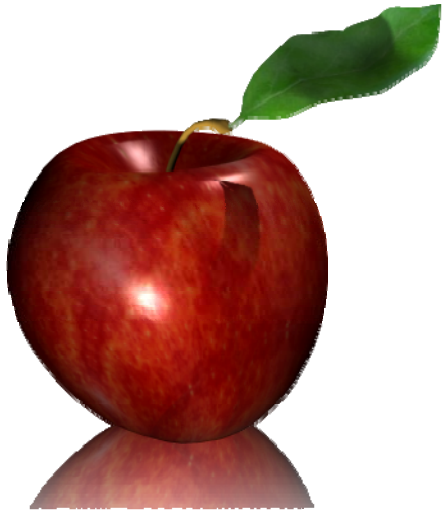
- Discuss how you might promote the use of this data collection method, e.g.,
  - ❑ Creating assessment materials for teachers
  - ❑ Arranging for teacher training
  - ❑ Having teachers pilot the method and provide feedback on how to improve.

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

Placing Data in a 'Data Context'

Focus of Inquiry: What simple organizing tool can teachers use to help them to structure their data collection—to include baseline, goal, and progress-monitoring?



The Structure of Data Collection pp. 31-35

- 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: _____

SET-UP

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 _____

BASELINE

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: _____

Baseline	
1. Date: ___/___/___ Obsv: _____	3. Date: ___/___/___ Obsv: _____
2. Date: ___/___/___ Obsv: _____	4. Date: ___/___/___ Obsv: _____
	5. Date: ___/___/___ Obsv: _____

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

_____

PROGRESS-MONITORING

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:	

Progress-Monitoring	
1. Date: ___/___/___ Obsv: _____	5. Date: ___/___/___ Obsv: _____
2. Date: ___/___/___ Obsv: _____	6. Date: ___/___/___ Obsv: _____
3. Date: ___/___/___ Obsv: _____	7. Date: ___/___/___ Obsv: _____
4. Date: ___/___/___ Obsv: _____	8. Date: ___/___/___ Obsv: _____
	9. Date: ___/___/___ Obsv: _____

Setting Up Effective Data Collection: Example

Example: Mrs. Braniff, a 3rd-grade teacher, decided to use a math time drill intervention to help her student Brian to increase his fluency with basic multiplication problems (0-9).

- To measure Brian's progress on the intervention, Mrs. Braniff decided to use Curriculum-Based Measurement Math Computation worksheets (created on www.interventioncentral.org).
- She used the *RTI Classroom Progress-Monitoring Worksheet* to organize her data collection.

RTI Classroom Progress-Monitoring Worksheet

SET-UP

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 _____

RTI Classroom Progress-Monitoring Worksheet

Student: ___Brian Jones__ Teacher: _____Mrs. Braniff_____ Classroom or Course: _Gr 3_____

SET-UP

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

Need to Become Fluent in Multiplication Facts: 0 to 9_____

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.).

Curriculum-Based Measurement: 2-Minute Timed Math Computation Probes_____

How frequently will this data be collected?: 1 times per Week

BASELINE

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.

_____

Baseline	3. Date: ____/____/____ Obsv: _____
1. Date: ____/____/____ Obsv: _____	4. Date: ____/____/____ Obsv: _____
2. Date: ____/____/____ Obsv: _____	5. Date: ____/____/____ Obsv: _____

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

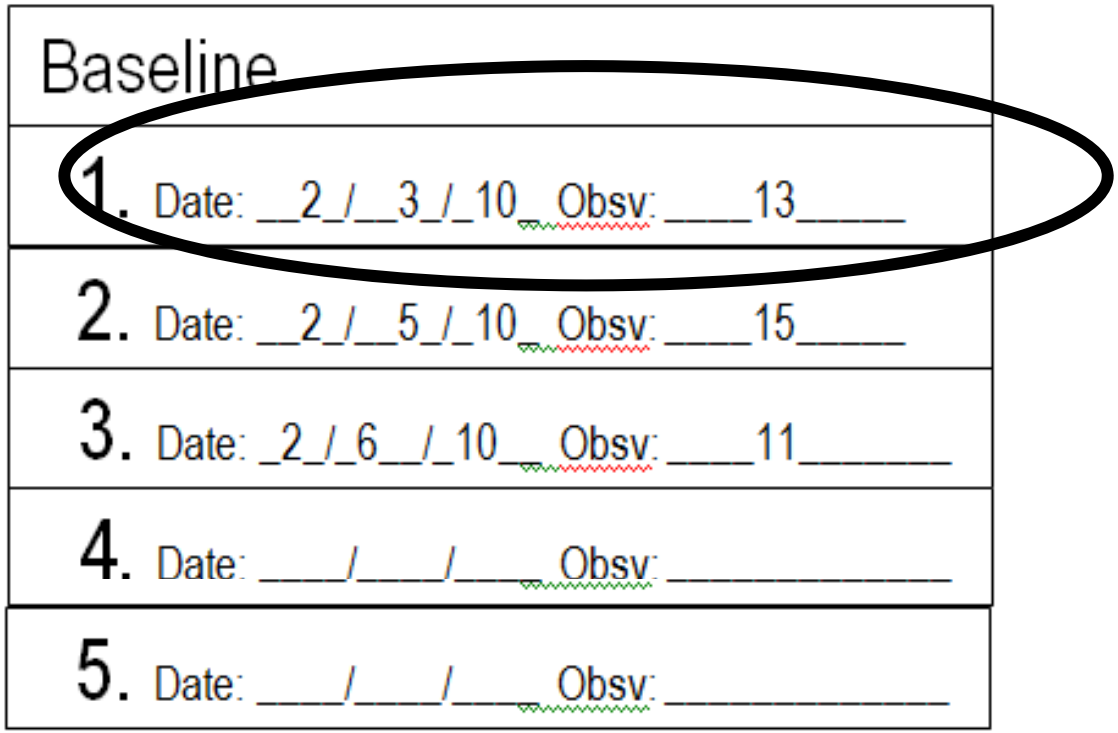
_____

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.



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.

Baseline
1. Date: __2_/__3_/_10_ Obsv: ____13_____
2. Date: __2_/__5_/_10_ Obsv: ____15_____
3. Date: _2_/_6__/_10__ Obsv: ____11_____
4. Date: ____/____/____ Obsv: _____
5. Date: ____/____/____ Obsv: _____

13+15+11=39

39 divided by 3=13

Mean = 13

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 3 observations, select the **median** value.

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

☐ Other: _____

_____

Baseline	3. Date: _11_/_21_/2011 Obsv: _34___
1. Date: _11_/_14_/2011 Obsv: _31___	4. Date: ____/____/____ Obsv: _____
2. Date: _11_/_17_/2011 Obsv: _28___	5. Date: ____/____/____ Obsv: _____

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

_____31 Correct Digits in 2 minutes_____

PROGRESS-MONITORING

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:	

Progress-Monitoring	
1. Date: ____/____/____ Obsv: _____	5. Date: ____/____/____ Obsv: _____
2. Date: ____/____/____ Obsv: _____	6. Date: ____/____/____ Obsv: _____
3. Date: ____/____/____ Obsv: _____	7. Date: ____/____/____ Obsv: _____
4. Date: ____/____/____ Obsv: _____	8. Date: ____/____/____ Obsv: _____
	9. Date: ____/____/____ Obsv: _____

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.

D. Determine Intervention Timespan: The intervention will last 6 instructional weeks and end on _1_/_13_/2012

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.

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:

40 Correct Digits in 2 minutes

F. **Decide How Student Progress is to Be Summarized:** Select a method for summarizing student progress ('outcome') attained when the intervention ends. S*tudent 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.

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 2 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:	

Progress-Monitoring	5. Date: _01_/_06_/2012 Obsv: _41___
1. Date: _12_/_02_/2011 Obsv: _29___	6. Date: _01_/_13_/2012 Obsv: _43___
2. Date: _12_/_09_/2011 Obsv: _34___	7. Date: ____/____/____ Obsv: _____
3. Date: _12_/_16_/2011 Obsv: _35___	8. Date: ____/____/____ Obsv: _____
4. Date: _12_/_22_/2011 Obsv: _39___	9. Date: ____/____/____ Obsv: _____

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:	42
The PERFORMANCE GOAL for improvement (Step E) is:	40

EXAMPLE: RTI Classroom Progress-Monitoring Worksheet p. 34

Mr. Brady, a 3rd grade teacher, plans an intervention for his student, Veronica, who lacks mastery of Grade 1 sight words.

Mr. Brady plans to monitor Veronica's sight word recognition weekly, using curriculum-based measurement (CBM) Word Reading Fluency probes from EasyCBM.

With this information, fill out sections A and B of the *RTI Classroom Progress-Monitoring Worksheet* .

RTI Classroom Progress-Monitoring Worksheet

Student: ___Veronica Anderson__ Teacher: _____Mr. Brady_____ Classroom or Course: Gr 3_____

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

Lack of Mastery of Grade 1 Sight Words_____

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.).

CBM: 1-Minute Word Reading Fluency Probes at Grade 1 from EasyCBM_____

How frequently will this data be collected?: 1 times per Week

RTI Classroom Progress-Monitoring Worksheet

Mr. Brady decides that he will collect 3 baseline data-points on Veronica. He also plans to take the median of those baseline data-points.

With this information, fill out section C of the *RTI Classroom Progress-Monitoring Worksheet*, including calculating the actual baseline figure.

Baseline Data for Veronica	
1/13/2012	8
1/17/2012	12
1/20/2012	9

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 3 observations, select the **median** value.

☐ Other: _____

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

_____

Baseline	3. Date: _1_/_20_/2012 Obsv: _9___
1. Date: _1 / 13 / 2012_ Obsv: _8___	4. Date: ____/____/____ Obsv: _____
2. Date: _1_/_17_/2012 Obsv: _12___	5. Date: ____/____/____ Obsv: _____

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

_____9 Correctly Read Words in 1 Minute_____

RTI Classroom Progress-Monitoring Worksheet

The teacher decides that the intervention for Veronica will last 7 instructional weeks, ending on Friday March 9, 2012.

Mr. Brady also consults Word Reading Fluency norms from easyCBM and decides to set an outcome goal for Veronica (at the end of the intervention) of 23 Correctly Read Words.

With this information, fill out sections D & E of the *RTI Classroom Progress-Monitoring Worksheet*.

RTI Classroom Progress-Monitoring Worksheet

D. Determine Intervention Timespan: The intervention will last 7 instructional weeks and end on 3 / 9 /2012

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:

23 Correctly Read Words in 1 Minute

RTI Classroom Progress-Monitoring Worksheet

Mr. Brady decides that he will summarize Veronica's progress by taking the median of the final 3 progress-monitoring observations. Progress-monitoring data appear to the right. With this information, fill out the remaining sections of the *RTI Classroom Progress-Monitoring Worksheet*.

Progress-Monitoring Data for Veronica	
1/25/2012	12
2/1/2012	9
2/7/2012	14
2/14/2012	17
2/22/2012	22
2/29/2012	26
3/7/2012	21

RTI Classroom Progress-Monitoring Worksheet

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 3 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 successfu

The student's ACTUAL Progress (Step F) is:	22
The PERFORMANCE GOAL for improvement (Step E) is:	23

Progress-Monitoring	
1. Date: _1_/_25_/2012 Obsv: _12___	5. Date: _2_/_22_/2012 Obsv: _22___
2. Date: _2_/_1_/2012 Obsv: _9___	6. Date: _2_/_29_/2012 Obsv: _26___
3. Date: _2_/_7_/2012 Obsv: _14___	7. Date: _3_/_7_/2012 Obsv: _21___
4. Date: _2_/_14_/2012 Obsv: _17___	8. Date: ____/____/____ Obsv: _____
	9. Date: ____/____/____ Obsv: _____

Benchmarks for Performance

Focus of Inquiry: How can research norms assist the teacher in monitoring student progress?

Research Norms: Screening for Risk

Research Norms Based on Fall/Winter/Spring Screenings.

The ideal source for performance information in any academic area is a set of high-quality research norms that:

- are predictive of student success in the targeted academic area(s)
- are drawn from a large, representative student sample
- include fall, winter, and spring norms
- provide an estimate of student risk for academic failure (e.g., that are divided into percentile tables or include score cut-offs denominating low risk/some risk/at risk).

An example of publicly available academic research norms can be found on:EasyCBM.com: http://www.easycbm.com

Example: easyCBM Cut-Points: Using Research Norms

- Low Risk/TIER 1: At or above the 20th percentile: *Core instruction alone is sufficient for the student.*
- Some Risk/TIER 2: 10th to 20th percentile: *Student will benefit from additional intervention, which may be provided by the classroom teacher or other provider (e.g., reading teacher).*
- At Risk/TIER 3: Below 10th percentile : *Student requires intensive intervention, which may be provided by the classroom teacher or other provider (e.g., reading teacher).*

Example: easyCBM Cut-Points: Using Research Norms

Grade 3 Reading Measures

Percentile	Word Reading Fluency			Passage Reading Fluency		
	Fall	Wint	Sprg	Fall	Wint	Sprg
10th	16	24	33	31	64	60
20th	25	36	46	51	81	81
50th	47	57	65	83	114	115
75th	61	72	76	108	147	144
90th	72	84	91	138	173	173

Source: EasyCBM Research Norms. (2010). Retrieved from http://www.easycbm.com/static/files/pdfs/info/ProgMonScoreInterpretation.pdf

Charting Data

Focus of Inquiry: How can progress-monitoring data be converted to a visual display to help teachers to make instructional and intervention decisions?

Progress monitoring involves the following steps*:

1. Establish a benchmark for performance and plot it on a chart (e.g., "read orally at grade level 40 words per minute by June"). It must be plotted at the projected end of the instructional period, such as the end of the school year.
2. Establish the student's current level of performance (e.g., "20 words per minute").
3. Draw an aim line from the student's current level to the performance benchmark. This picture represents the slope of progress required to meet the benchmark.
4. Monitor the student's progress frequently (e.g., every Monday). Plot the data.
5. Analyze the data on a regular basis, applying decision rules (e.g., "the intervention will be changed after six data points that are below the aimline").
6. Draw a trend line to validate that the student's progress is adequate to meet the goal over time.

*Oregon Department of Education, Office of Student Learning and Partnership (Revised December 2007) Identification of Students with Learning Disabilities under the IDEA 2004, Technical Assistance to School Districts, Oregon Response to Intervention

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf; p. 21

ChartDog GraphMaker

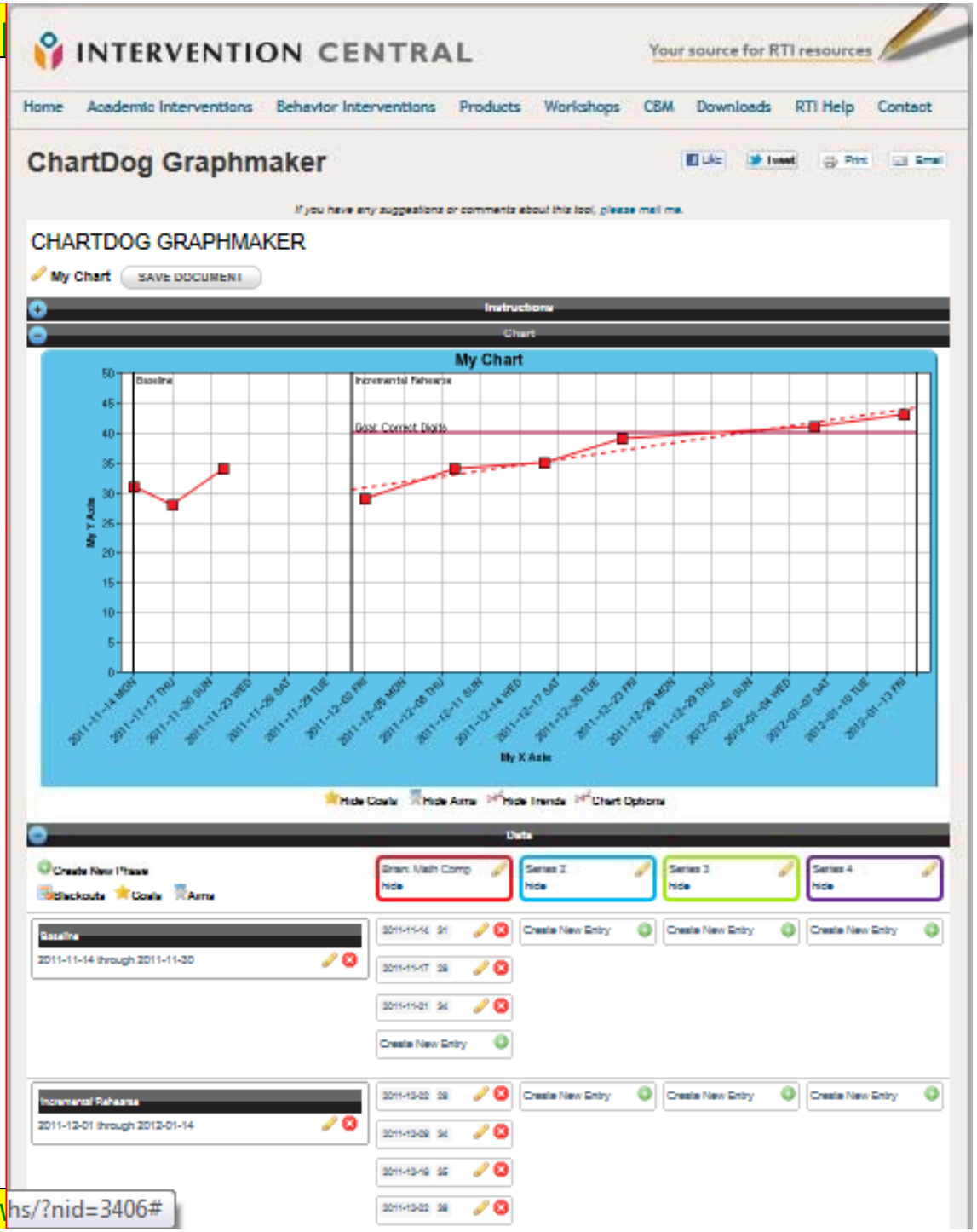
Provides teachers with a tool to create single-subject time-series graphs. The free application allows the user to save his or her data and store online. ChartDog also allows the user to:

- enter up to four data series on one graph
- enter and label phase changes
- set goal-lines and aimlines
- compute trend-lines for any data series by phase
- compute percentage of non-overlapping data points
- compute No-Assumptions Effect Size (NAES) between 2 phases

Resp

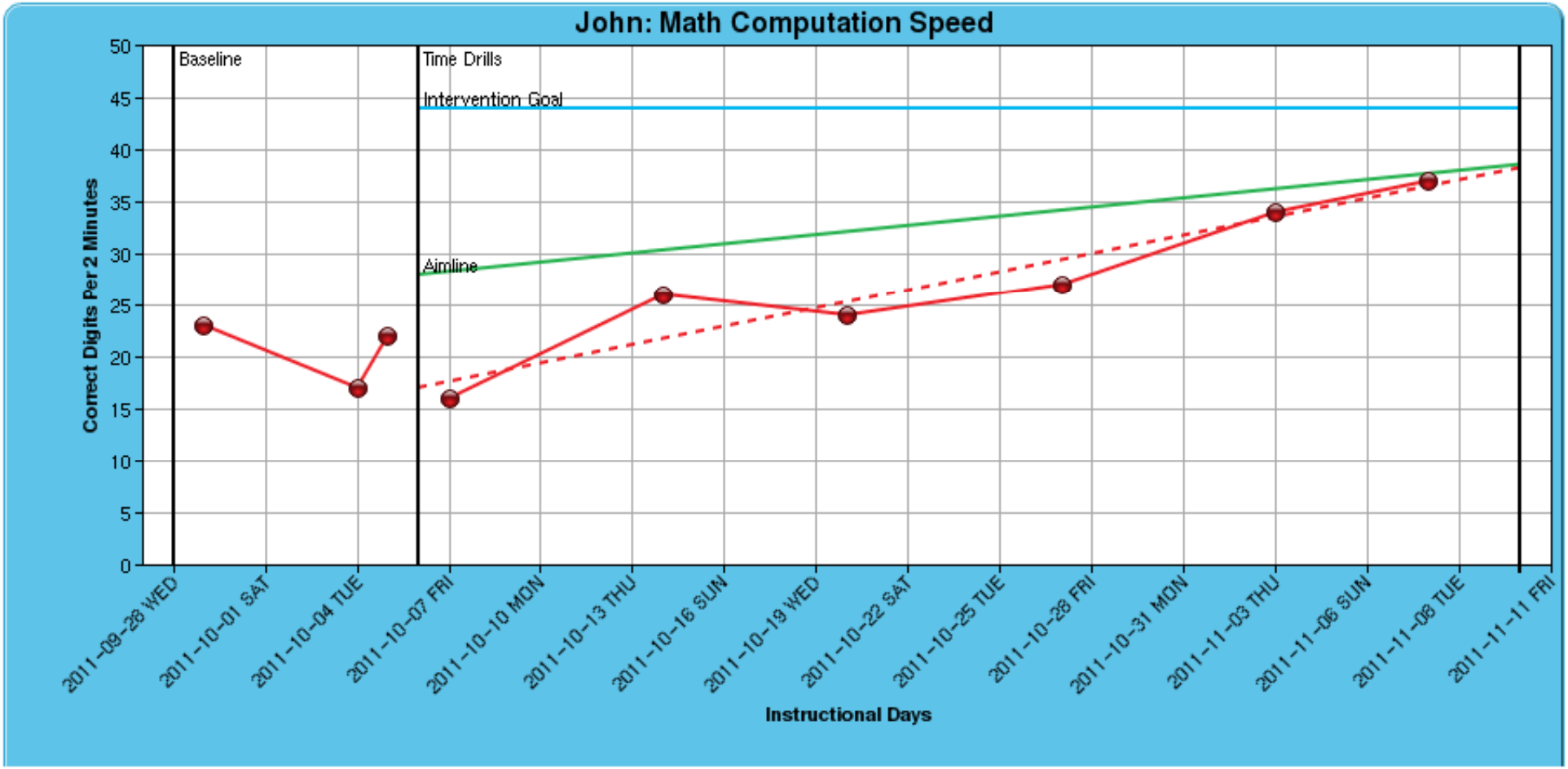
ChartDog

www.interventioncentral.org



whs/?nid=3406#

ChartDog Graph Maker



Review the '*Quality Indicators for Progress-Monitoring*' below from the New York State RTI Guidance Document. **Decide** on 2-3 key 'next steps' that you would like to take to make use of the resources / recommendations on data collection shared at today's workshop.

Quality Indicators for Progress Monitoring

- Progress monitoring of student performance occurs across all tiers.
- Teachers follow a designated procedure and schedule for progress monitoring.
- Measures are appropriate to the curriculum, grade level and tier level.
- Data from progress monitoring are documented and analyzed.
- A standardized benchmark is used to measure progress and determine progress sufficiency.
- Teachers use progress monitoring to inform instructional effectiveness and the need for changes in instruction or intervention.
- Graphs are used to display data for analysis and decision making.
- Staff receive training in the administration and interpretation of progress monitoring measures and the implications for instruction.
- The district has designated reasonable cut points, and decision rules of the level, slope or percentage of mastery to help determine responsiveness and distinguish adequate from inadequate responsiveness.
- When monitoring the progress of LEP/ELL students, the student's progress is compared with the levels of progress demonstrated by peers from similar cultural and linguistic backgrounds who have received the interventions.

Source: New York State Education Department. (October 2010). *Response to Intervention: Guidance for New York State School Districts*. Retrieved November 10, 2010, from http://www.p12.nysed.gov/specialed/RTI/guidance-oct10.pdf; p. 22