Using Classroom Data to Set Goals and Monitor Student Progress

Jim Wright www.interventioncentral.org





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RTI Toolkit: A Practical Guide for Schools

Classroom Data Collection: Resources

Jim Wright, Presenter

Email: jimw13159@gmail.com

Workshop Downloads at: http://www.interventioncentral.org/data

Workshop PPTs and handout available at:

http://www.interventioncentral.org/data

MTSS: Admins/Interventionists: Qs

- How best can we track students when groups are flexible, and therefore, change frequently? How do we most effectively track, when incoming students are then mixed with students who have already received weeks of intervention?
- I would like to ask him what other universal screeners or math assessments to recommend as entrance criteria for Tier 2? We currently only use AIMS and teacher recommendations.

MTSS: Elementary: Your Questions for Today

- How do we progress monitor skills (or do we need to?) - Smaller incremental skills rather than global growth. (Aims feels like it misses the skills we are focusing on...)
- How do we progress monitor writing skills?
- Tier I and II progress monitoring for social skills?
- Can you provide us with examples of tier 1, 2, 3 behavior interventions and tools for progress monitoring?

Team Activity: Provide an RTI/MTSS Update

Each building team will:

- appoint a spokesperson.
- prepare to update the group on the RTI/MTSS work that it has accomplished since our last district meeting in November.
- note any RTI/MTSS questions that your team has or technical assistance that you need.

Take a few minutes to discuss your accomplishments and prepare a brief report-out.



4 Goals for Today's Data-Collection Workshop

- 1. US: Review key principles of data collection and interpretation.
- 2. US: Examine specific data-collection tools.
- 3. YOU: Identify which concepts and tools will be most helpful to you.
- 4. YOU: Decide on 'next steps' to use today's workshop ideas and resources back in your school/district.

Small-group interventions for Small-group interventions to emerging behavioral address off-grade-level academic deficits problems Regular progress-monitoring Regular progress-monitoring Tier 1: Universal: Classroom Tier 1: Universal: Core Instruction: Management: 80% 80% Clear behavioral expectations Effective group instruction Effective class-wide Universal academic screening management strategies Academic interventions for Universal behavior screening struggling students Source: Grosche, M., & Volpe, R. J. (2013). Response-to-intervention (RTI) as a model to facilitate inclusion for students with learning and behaviour problems. European Journal of Special Needs Education, 28, 254-269. http://dx.doi.org/10.1080/08856257.2013.768452

BEHAVIORAL RTI

Tier 3: High-Risk Students: 5%

Functional Behavioral

Assessments (FBAs)

(BIPs)

Behavior Intervention Plans

Daily progress-monitoring

Tier 2: At-Risk Students: 15%

Wrap-around RTI Team meetings

ACADEMIC RTI

Tier 3: High-Risk Students: 5%

Diagnostic assessment of

academic intervention plan

Daily progress-monitoring

Tier 2: At-Risk Students: 15%

academic problems

RTI Team Meetings

Customized/intensive

The Struggling Student: Data Tells a Story...

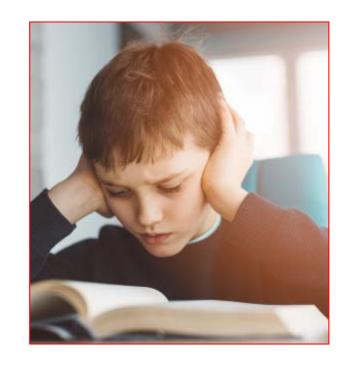
Whenever a student has behavioral challenges, you look to data to tell a coherent story about the student. If any of these elements are missing, the 'data story' can become garbled:

- What academic/behavior problem(s) is the student experiencing?
- What is the student's current performance?
- What goal will you set to show that the behavior has improved?
- How will you use data as feedback to judge your intervention's effectiveness?

RTI/MTSS Files

Jared
Grade 5

Problem: Failure to recall information from readings



*Intervention:*Read Actively

RTI/MTSS Files

- Problem: Jared is a fluent reader but frequently fails to monitor his understanding when reading assigned non-fiction passages. As a result, he often fails to recall key information (generalization deficit).
- Intervention: Jared's 5th-grade teacher, Mr. Griffin, chooses Read Actively as a student strategy to promote better recall of key ideas.



Classroom Intervention Plan for Jared

Description of the Student Problem			
Environmental Conditions or Task Demands	Problem Description	Typical or Expected Level of Performance	
When assigned to read an informational passage and to complete a written recall	Jared is inconsistent in recalling main ideas/details from the passage	recalls from the	

General Problem: Jared does not recall key ideas from readings.

Reading Comprehension: Read Actively

- The instructor teaches students to first read through each paragraph, paying attention to the topic and important details and facts.
- The instructor then directs students to cover the paragraph and state (or silently recall) the key details of the passage.
- Finally, the instructor prompts students to uncover the passage and read it again to see how much of the information in the paragraph the student accurately recalled.
- This process is repeated with all paragraphs in the passage.

Classroom Intervention Plan for Jared

Intervention

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

Mr. Griffin will supervise Jared's use of the Read Actively intervention during independent reading time.

Initially, Mr. Griffin will sit with Jared and coach him in use of the strategy. The goal at the end of the initial 6 weeks is for Jared to use the strategy independently.

 Progress-Monitoring: Mr. Griffin decides to collect and evaluate Jared's written retells, using a written-retell rubric. After each reading, Jared writes a retell summarizing key information from the reading. The rubric scores the retell using 4 categories ("General Purpose/Gist"; "Organization", etc.), with each evaluated on 4point scale—16-point rubric maximum.

At **baseline**, Jared scores an average of 7 points of 16 on the rubric. If the intervention is effective, the teacher expects that Jared's rubric ratings will rise to at least 12 of 16 (a rating of 'Capable').

Sample Retell Rubric

MLPP RETELLING RUBRIC K - 12 INFORMATIONAL TEXT

Qualities of Retelling	4 Mature	3 Capable	2 Developing	1 Beginning
Central Purpose/Gist	Retelling indicates a clear and elaborated understanding of the central purpose of the selection.	Retelling indicates a basic understanding of the central purpose of the selection.	Retelling indicates an incomplete or inaccurate understanding of the central purpose of the selection.	Retelling indicates no understanding of the central purpose of the selection.
Restatement/ Elements	Retelling contains a clear and accurate restatement of important and supporting elements. May contain related prior knowledge.	Retelling contains a clear and accurate restatement of most important and supporting elements.	Retelling lacks important elements and/or contains inaccurate information.	Retelling is minimal and inaccurate.
Organization	Important and supporting elements are logically presented and clearly connected.	Most important and supporting elements are presented logically and connected.	Elements are presented in a random or disconnected order.	There is little or no development of elements.
Linguistic Spillover	Use of language, conventions, and/or format from the selection reflects an elaborated and personalized understanding of the information.	Use of language, conventions, and/or format from the selection indicates basic understanding of the information.	Use of language, conventions, and/or format from the selection may indicate superficial understanding.	Retelling includes little or no use of language, conventions, and/or format from the selection.

Source: Source: Michigan's Mission: Literacy Website: Informational Passage Retell Rubric. Retrieved from http://www.missionliteracy.com/uploads/3/4/4/5/34456187/retelling_rubric_-information_text_k-12.doc

Classroom Intervention Plan for Jared

Progress-Monitoring. Select a method to monitor	•
student progress.	

Type of Data Used to Monitor:

Written Retells and Informational-Passage Retell Rubric from www.missionliteracy.com

Baseline	Outcome Goal
Global Rubric Rating: 7/16 pts	Global Rubric Rating: 12/16 pts (6 wks)

How often will data be collected? (e.g., daily, every other day, weekly): Weekly

Problem-Solving in Schools: Telling the Data Story

Teachers will want data to tell a student's intervention story when meeting with:

- parent and student to develop a plan to improve that student's course standing.
- the building's RTI/MTSS Problem-Solving Team to describe classroom intervention efforts.
- the Section 504 Committee to discuss whether the supports in a student's current 504 Accommodation Plan are adequate in the classroom.
- the Special Education Eligibility Team to review classroom efforts to support a student now being considered for LD.

Classroom Data Collection: The Basics...

Here are important guidelines: Tier 1/classroom data collection methods should:

- measure skill(s) targeted by the intervention. The educator
 wants to know whether the student is improving a specific skill
 or behavior. The data-collection method is selected to track
 growth in that skill or behavior.
- be sensitive to short-term gains. Progress-monitoring should reveal in weeks—not months— whether the intervention is effective.
- yield a specific number value. The teacher selects progress-monitoring tool(s) that can be converted to numeric data—and charted.

Workshop Topics

- 1. Reviewing 'Big Ideas'. What are important concepts relating to data collection?
- 2. Creating a Monitoring Plan. What are the 7 steps to creating a plan to monitor a student's intervention progress?
- 3. Data Collection: Behavior. What tools are best to collect reliable behavioral data?
- 4. Data Collection: Academics. How can Curriculum-Based Measurement and other data tools help schools to track academic performance?
- 5. Documenting Progress-Monitoring Plans. What is a simple format to put student monitoring plans in writing?

Monitoring Student Progress on Classroom Interventions: Five Big Ideas. These 5 big ideas can help teachers to more effectively and efficiently collect and interpret student data in the classroom ... pp. 2-3

Data Collection: How to Monitor Classroom Interventions @ 2020 Jim Wright



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Monitoring Student Progress on Classroom Interventions: 5 Big Ideas

Teachers collect and interpret multiple streams of classroom data continuously to make ongoing judgments about whether groups or individual learners are understanding instructional content, making adequate progress in coursework, and behaving appropriately. Here are five 'big ideas' about monitoring student progress that can assist teachers in collecting more useful data efficiently and making better decisions about students' response to classroom interventions.

 Define the student problem clearly. Before the teacher can select a method of data collection to monitor student progress, that instructor must first define the academic or behavioral problem clearly (Christ, 2008). Clear definitions of the presenting concern are called 'problem identification [ID] statements'.

Problem ID statements can often be improved by making them more specific and, when appropriate, by adding information about frequency, intensity, or other objective data to clarify the severity of the problem. For example, an instructor may initially come up with this problem ID statement, 'Angela is disruptive in class.' This vague statement can be improved with detail, e.g., 'Angela argues and refuses to comply when given a teacher request.' Similarly, a teacher's concern that 'Sam never turns in homework' can be improved if she consults her gradebook for information about how frequently the student submits work, e.g., 'Sam turns in homework only about 25 percent of the time."

Table 1 provides examples of how to compose specific, data-based problem-ID statements.

T	Table 1: How to Strengthen Descriptions of Academic and Other Behaviors				
	Descriptions needing improvement.	Joshua does not know his math facts. This description is too general: what does it mean to "know a math fact" and what specific facts does the student not know?	Anne doesn't respect adults. This description is vaguely worded and includes an unnecessary		
	Get Specific. Describe behaviors in specific terms without added value judgments.	Joshua does not know his multiplication 0-12 math facts.	value judgement. Anne often fails to comply with teacher requests.		
	 Use Data. Make use of available data (when available) to provide additional information about current student performance. 	When shown multiplication 0-12 Scholastic math-fact flash cards for 3 seconds, Joshua can answer 32 of 58 correctly.	When given directives in math class, Anne complies with those directives about 50% of the time.		
	Reframe. State behaviors (when possible) as positive 'goal' statements.	When shown multiplication 0-12 Scholastic math-fact flash cards for 3 seconds, Joshua will answer 58 of 58 correctly [with 95% accuracy].	When given directives in math class, Anne will comply with those directives within 1 minute without argument or complaint at least 90% of the time.		

Take full advantage of practical progress-monitoring tools available in the classroom. There are a range of data-collection methods that teachers can use to track student progress on academic or behavioral interventions, such as grades, rubrics, student interviews, behavior report cards, and checklists. Most of these measures are teacher-made and have the advantage of measuring the student's actual observed behavior or

Handout: pp. 2-3



Data Collection: 5 Big Ideas...

Define the student problem clearly. Before selecting a method of data collection to monitor student progress, the teacher must first define the academic or behavioral problem clearly (Christ, 2008). These are called 'problem identification [problem ID] statements'.

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V				the time.	



Data Collection: 5 Big Ideas...

Take advantage of practical classroom progressmonitoring tools. Teachers can use lots of data-collection methods to track student progress on academic or behavioral interventions: e.g., grades, rubrics, interviews, behavior report cards, and checklists.

Such 'informal' measures may appear to lack the rigor of more formal norm-referenced assessments. But the reduced stakes of classroom interventions mean that measures used to track success on these general-education interventions can also be less rigorous (Hosp, 2008).



Data Collection: 5 Big Ideas...

Baseline: Know the student's starting point. When preparing to monitor a student on intervention, the teacher typically first collects 'baseline' data. The instructor assesses the student's academic or behavioral performance on one or more occasions before the intervention starts—and uses this preliminary data to estimate that student's starting point or current level of performance (Hixson, Christ & Bruni, 2014).

Baseline information is also used as a point of comparison throughout the intervention period to judge whether that student has made progress.



Data Collection: 5 Big Ideas...

Set an intervention goal. Before launching an intervention and monitoring progress, the teacher establishes a student outcome goal (Hixson, Christ & Bruni, 2014). To compute this outcome goal, the instructor decides how many instructional weeks the intervention will last and calculates a 'realistic but ambitious' performance goal for the student to meet or exceed by the end of the intervention period.

The intervention goal allows the teacher a simple, unambiguous standard against which to judge the success of the intervention.



Data Collection: 5 Big Ideas...

Reduce the 'noise' in the data. All real-world student performance data contains both real information and an element of error (Hosp, 2008).

Error in measurement is a natural element of data collection and can arise from many sources; e.g., fluctuations in mood and motivation; variability in data collection, scoring, and interpretation; the presence of environmental distractions. Error in data collection is ever-present. Teachers, however, can take action to minimize the 'noise', or 'error', and to maximize the 'signal', or 'true' information, that data contains.

Big Ideas in Data Collection: Activity

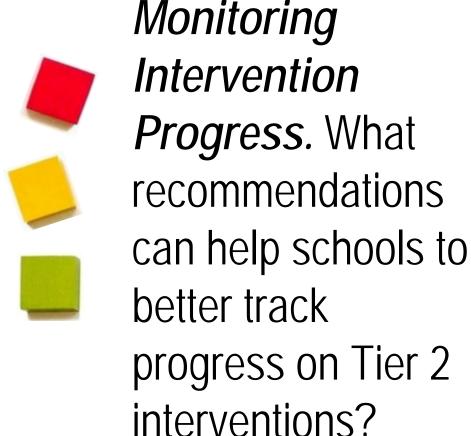
- Discuss the 5 big ideas presented here (handout: pp. 2-3).
- Pick one of the datacollection ideas that you feel is most important for classroom teachers to remember.

Interventio<mark>nCentral</mark> 5-Minute 'Count Down' Timer

05:00

Monitoring Student Progress on Classroom Interventions: Five Big Ideas

- 1. Define the student problem clearly.
- 2. Take full advantage of practical progress-monitoring tools available in the classroom
- 3. Baseline: Know the student's starting point.
- 4. Set an intervention goal.
- 5. Reduce the 'noise' in the data.





Progress-Monitoring: Big Picture or Close-Up?



TELESCOPE: General Outcome
Measures: Global 'capstone'
assessments requiring that the student
apply several skills at once (e.g., fluency
with text; math problem-solving). STAR
Reading is an example.





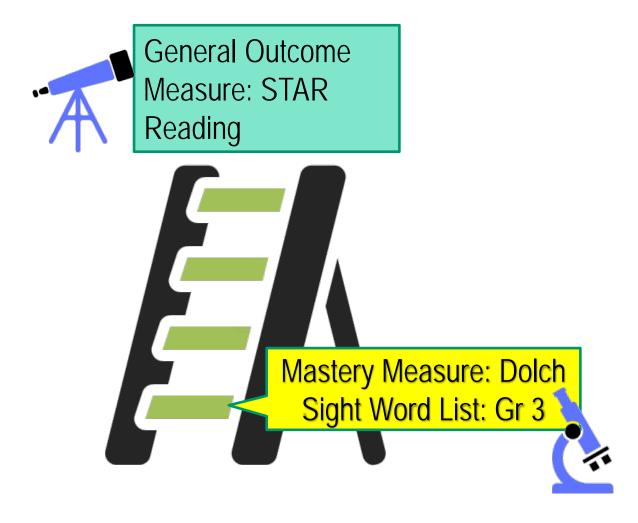
MICROSCOPE: Mastery Measures.

Discrete, targeted assessments to track easily identified sets or domains of items typically mastered over a relatively short period. Sight-word lists and timed letternaming assessments are examples.



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.

Mastery Measures Contribute to General Outcome Measure...Over Time



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.

Mastery Measures: Collect Data on the 'Obstacle' to Success

To develop a classroom intervention plan, the teacher must first identify some element of the student's current academic performance or behavior that presents an **obstacle** to success.

Once identified, this obstacle becomes the focus on the intervention plan. It also becomes the focus in selecting **short-term mastery measure(s)** to track student progress.

Tier 2 Progress-Monitoring: A 'Twin-Track' Approach...

When possible, Tier 2 interventions should be monitored using short-term mastery measures.

Optionally, the teacher may also review standard 'general outcome measure' grade-level assessments already in place (e.g., instructional reading assessments, grades, screener) to note global gains in student academic skills.



General Outcome Measure 1: STAR



General Outcome Measure 2: STAR



Mastery
Measure:
Dolch Sight
Words 1



Mastery
Measure:
Dolch Sight
Words 1



Mastery
Measure:
Dolch Sight
Words 1



Mastery Measure: Dolch Sight Words 1

How to Monitor Basic Academic Skills: Curriculum-Based Measurement (CBM)



Classroom Data Tool: Curriculum-Based Measurement/Assessment

 What It Is: A series of brief measures of basic academic skills given under timed conditions and scored using standardized procedures.

CBM/CBA measures often include research-derived benchmark norms to assist in evaluating the student's performance.

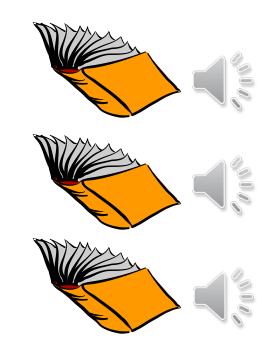
Classroom Data Tool: Curriculum-Based Measurement/Assessment

- What It Can Measure:
 - ☐ Speed and accuracy in basic academic skills, such as:
 - ☐ letter naming: 1 min
 - □ number naming: 1 min
 - □ number sense: 1 min
 - ☐ oral reading fluency: 1 min
 - ☐ reading comprehension (maze): 3 mins
 - ☐ production of writing: 3 mins
 - ☐ math fact computation: 2 mins

Fluency Example: CBM Student Reading Samples: What Difference Does Fluency Make?

• 3rd Grade: 19 Words Per Minute

- 3rd Grade: 70 Words Per Minute
- 3rd Grade: 98 Words Per Minute



DIBELS: A Reading Assessment Toolkit

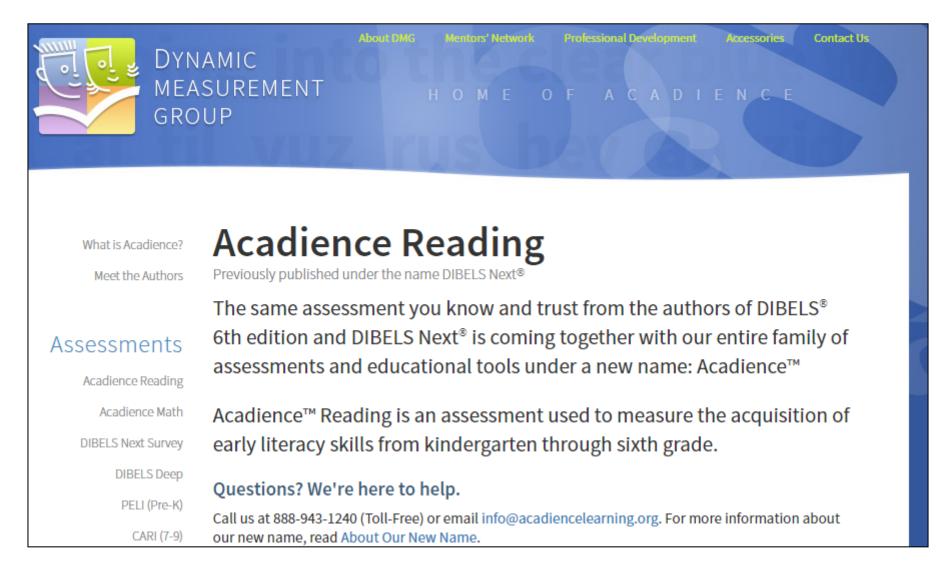


There are a variety of measurement products on the market that have been designed using CBM research.

The example presented here is a widely-used battery of fluency assessments for reading called DIBELS Next: https://dibels.org/dibelsnext.html. (DIBELS stands for Dynamic Indicators of Basic Early Literacy Skills.) NOTE: DIBELS is being renamed Acadience Learning.

DIBELS Next is a well-researched collection of 6 CBM-type assessments available to teachers at no cost to download, print, and use with their students. There are enough materials to monitor students weekly.

Acadience: https://acadiencelearning.org/



1. Phonemic Awareness:
The ability to hear and manipulate sounds in words.

 Alphabetic Principle: The ability to associate sounds with letters and use these sounds to form words.

Five Components of Reading



- Fluency with Text: The effortless, automatic ability to read words in connected text.
- Vocabulary: The ability to understand (receptive) and use (expressive) words to acquire and convey meaning.
- 5. Comprehension: The complex cognitive process involving the intentional interaction between reader and text to convey meaning.

DIBELS Next Reading Assessments

- First Sound Fluency: Phonemic Awareness
- Letter Naming Fluency: Alphabetics/Phonics
- Phoneme Segmentation Fluency: Alphabetics/Phonics
- Nonsense Word Fluency: Alphabetics/Phonics
- DIBELS Oral Reading Fluency (DORF)
- DIBELS Maze Passages (DAZE):
 Comprehension

Measure	Reading Component(s) Assessed	Time to administer	Grade Range/Screening
First Sound	Phonemic	1 minute	 Kdg: Fall & Winter
Fluency (FSF).	Awareness		screenings
The examiner			
reads words			
aloud from a list.	dran		
The student says	drop		
the first sound for			
each word.			

Measure	Con	ding npon esse	· ·)	Time admir			ade inge/	Scre	ening	
Letter Naming Fluency (LNF). The student	Prin	nabeti ciple/ nics			1 minu	ute	•	Grad	All yede 1: ening	Fall	
reads aloud the names of letters	I	Т	u	J	V	S	0	i	Х	р	W
from a sheet with randomly arranged letters.	М	Q	у	n	k	d	D	t	е	I	С

Measure	Reading Component(s) Assessed	Time to administer	Grade Range/ Screening
Phoneme	Phonemic	1 minute	Kdg: Winter &
Segmentation	Awareness		Spring
Fluency (PSF). The			screenings
examiner reads			Grade 1: Fall
words aloud from a			screening
list. The student says			
the individual sounds	flag		
making up each	TIUB		
word.			

DIBELS Next Literacy Fluency Measures

Measure	Reading Component(s) Assessed	Time to administer	Grade Range/Screening
Nonsense Word Fluency (NWF). The student reads aloud from a list of VC and CVC nonsense words.	Alphabetic Principle/ Phonics	1 minute	 Kdg: Winter & Spring screenings Grade 1: All year Grade 2: Fall screening

mus av wec miv dop

Measure	Reading Component(s) Assessed	Time to administer	Grade Range/Screening
DIBELS Oral	Reading	1 minute for	• Grade 1: Winter
Reading Fluency	Fluency	initial	& Spring
(DORF). The student		reading; 1	Screenings
reads aloud from a		minute for	Grades 2-6: All
text passage and is		student retell	year
then asked to retell			
the main details of			
the reading.			

DIBELS NEXT

Example: DORF

Total	words:	

Errors (include skipped words): -

Words correct: = _____

The Land Bridge

_	During the last lee age, the world looked much different than it does	10
13	today. Nearly all the land was covered with huge sheets of ice or glaciers.	27
27	Most of the world's water was trapped in these glaciers, and the water	40
40	level of the seas was low. A vast amount of land was above the water.	55
55	The narrow waterway between Asia and North America, the Bering	65
65	Strait, was mostly exposed land at that time. The land formed a narrow	78
78	bridge that connected Asia with North America. This land bridge was	89
89	cold and flat, and was covered by grass and shrubs. Before the formation	102
102	of the land bridge, early people who wanted to travel to North America	115
115	had to go by boat. Very few people actually made the voyage over the	129
129	water. Many more people traveled to North America when they were able	141

During the last ice age, the world looked much different than it does

Measure	Reading Component(s) Assessed	Time to administer	Grade Range/ Screening
Daze. The student is	Reading	3 minutes	• Grades 3-6:
given a Maze passage to	Comprehension		All year
read silently. For each			
response item, the			
student reviews 3			
choices and selects the			
word that best completes			
the meaning of that part			
of the passage.			

DIBELS NEXT

Example: DAZE

Taking Great Nature Photographs

Many people love looking at a beautiful landscape or at waves crashing into rocks on a

wind-swept beach. They may want to capture a need

distant bit

of it on camera in order to blur

share how

it with

is when

others. Because the subject remember so beautiful, they think, "This is

rather sure

whole to be a wonderful

photograph!"

pictures However, taking

puddle

tricky majestic

a good nature photograph can be shooting. If you're not careful, a majestic

will help

mountain

Wind Crashing may look like a distant pebble.

Placing

waves can easily become a gray

vibrant light blur

with

Lab Work: Create a Tier 1/ Classroom Data-Collection 'Bank'



Teachers need easy access to methods to collect data on interventions.

Discuss how your school(s) might develop a bank of data-collection tools for teachers.

Important Qs:

- ☐ Who would participate in this project?
- ☐ How would data-collection resources be stored and shared with others?
- What is a timeline for getting a data-collection bank into the hands of teachers in your school(s)?



Curriculum-Based Measures (CBMs) from Intervention Central CBM Skill Area Activity

randomly generated list.

meaning to the passage.

Number Identification

Writing Sequences.

credit for each correct digit.

1 Minute: Student reads letter names or sounds from a

1 Minute: Student reads aloud from a text passage.

3 Minutes: Student reads silently from a Maze passage

and selects correct word in each choice item that restores

1 Minute: Student completes an Early Math Fluency probe:

(1) Quantity Discrimination; (2) Missing Number; or (3)

2 Minutes: Student completes math facts and receives

4 Minutes: Student reads a story-starter (sentence stem),

then **produces a writing sample** that can be scored for

Total Words Written, Correctly Spelled Words, Correct

53

Alphabetics/

Reading Fluency

Comprehension

Number Sense

Math Fact

Mechanics/

Conventions of

Fluency

Writing

Phonics

Reading

Letter Sound Fluency/Letter Name

Oral Reading Fluency

Fluency

Reading

Comprehension

Fluency (Maze)

Early Math Fluency

Computation Fluency

Written Expression

CBM: Letter Knowledge

 The ability of young children to identify letter names and sounds quickly and accurately gives information about their phonics/alphabetics skills, which are necessary tools for reading.

Five Core Components of Reading

- "Phonemic Awareness: The ability to hear and manipulate sounds in words.
- Alphabetic Principle: The ability to associate sounds with letters and use these sounds to form words.
- Fluency with Text: The effortless, automatic ability to read words in connected text.
- Vocabulary: The ability to understand (receptive) and use (expressive) words to acquire and convey meaning.
- Comprehension: The complex cognitive process involving the intentional interaction between reader and text to convey meaning."

Letter Knowledge: Letter Name Fluency (LNF) [1 minute]:

Grade	Percentile	Fall LNF (Riverside, 2013)	Winter LNF (Riverside, 2013)	Spring LNF (Riverside, 2013)	Weekly Growth (Calculated across 32 Instructional Wks)
	E00/:I	40	0.5	4.5	0.04

		(Riverside, 2013)	(Riverside, 2013)	(Riverside, 2013)	across 32 Instructional Wks)
1/	50%ile	19	35	45	0.81

		(Riverside, 2013)	(Riverside, 2013)	(Riverside, 2013)	Instructional Wks)
1/	50%ile	19	35	45	0.81
	000/:1	_	0.0	0.0	0.07

		(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(**************************************	(**************************************	Instructional Wks)
1/	50%ile	19	35	45	0.81
K	200/:16	Г	22	20	0.07

1/	50%ile	19	35	45	0.81
K	20%ile	5	22	36	0.97
	10%ile	2	13	29	0.84

56

42

34

68

49

88.0

0.66

0.69

50%ile

20%ile

10%ile

40

28

20

(Riverside, 2013)*
the CBM-Letter Name Fluency (LNF) task, the student is given a random list of upper- and lower-case letters and s 1 minute to identify the names of as many letters as possible.

Grade	Percentile	Fall	Winter	Spring	Weekly Growth
		LNF	LNF	LNF	(Calculated
		(Riverside, 2013)	(Riverside, 2013)	(Riverside, 2013)	across 32
					In atmostic and Miles

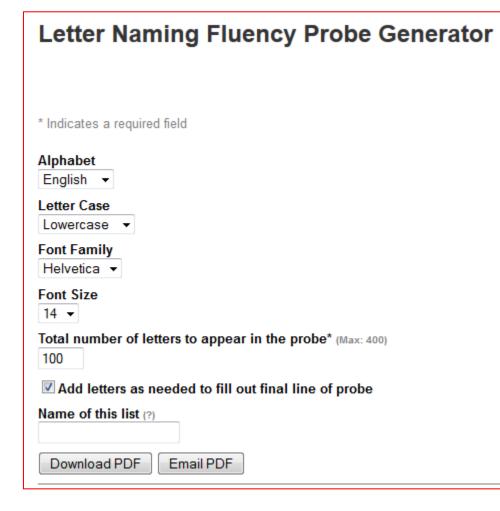
Grade	Percentile	Fall	Winter	Spring	Weekly Growth
		LNF	LNF	LNF	(Calculated
		(Riverside, 2013)	(Riverside, 2013)	(Riverside, 2013)	across 32
					Instructional M/ka)

Curriculum-Based Measurement: Letter Name Fluency (LNF) Norms
letters and identifies the names of as many letters as possible
The student is given a random list of upper- and lower-case

3	<i>3</i>	, -	-
The student is given a random list of	of upper- and	d lower-cas	se
letters and identifies the names of a	as many lette	ers as pos	sible.
Curriculum-Based Measurement: Letter I	Name Fluenc	v (LNF) N	orms

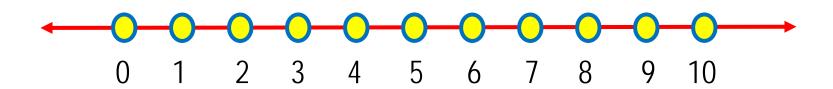
Letter Name/Sound Fluency Probe Generator http://www.interventioncentral.org

Use this free online application to design and create Letter Name and Letter Sound Fluency Probes.



CBM: Early Math Fluency: Measuring 'Number Sense'

 Early Math Fluency measures track primarygrade students' acquisition of number sense (defined as mastery of internal number line)



• Early Math Fluency: Quantity Discrimination [1 minute]: The student is given a worksheet with number pairs and, for each pair, identifies the larger of the two numbers.

4 12

sampled	sampled from 1-20 and must identify the larger number in each pair.								
Grade	Fall QD (Chard et al.,	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Winter QD (Chard et al., 2005)	Winter: +/-1 SD (≈16th%ile to 84th%ile)	Spring QD (Chard et al., 2005)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth		
	2005)	04ti17tile)	ai., 2000)	0401701le)	al., 2000)	04ti17tile)			
K	15	8↔22	20	8↔32	23	12↔34	0.25		
1	23	16↔30	30	21↔39	37	28↔46	0.44		

Quantity Discrimination (QD): 1 Minute: The student is presented with pairs of numbers randomly

Source: Chard, D. J., Clarke, B., Baker, S., Otterstedt, J., Braun, D., & Katz, R. (2005). Using measures of number sense to screen for difficulties in mathematics: Preliminary findings. Assessment for Effective Intervention, 30(3), 3-14.

Early Math Fluency: Missing Number [1 minute]: The student is given a worksheet with 4-digit number series with one digit randomly left blank and, for each series, names the missing number.
 14
 16
 17

Missing Number (MN): 1 Minute: The student is presented with response items consisting of 3 sequential numbers with one of those numbers randomly left blank. (Each 3-number series is randomly generated from the pool of numbers 1-20.) The student attempts to name the missing number in each series.

from the poor of numbers 1-20.) The student attempts to name the missing number in each series.								
Grade	Fall	Fall: +/-1	Winter	Winter: +/-1	Spring	Spring: +/-1	Weekly	
	MN	SD	MN	SD	MN	SD	Growth	
	(Chard	(≈16th%ile to	(Chard et	(≈16th%ile to	(Chard et	(≈16th%ile to		
	et al., 2005)	84th%ile)	al., 2005)	84th%ile)	al., 2005)	84th%ile)		
K	3	0↔7	10	3↔17	14	7↔21	0.34	
1	9	3↔15	17	11↔23	20	14↔26	0.34	

Source: Chard, D. J., Clarke, B., Baker, S., Otterstedt, J., Braun, D., & Katz, R. (2005). Using measures of number sense to screen for difficulties in mathematics: Preliminary findings. Assessment for Effective Intervention, 30(3), 3-14.

 Early Math Fluency: Number Identification [1 minute]: The student is given a worksheet randomly generated numbers and reads off as many as possible within the time limit.

34 37 50 38 1

numbers ranging from 1-20 and names as many of those numbers aloud as time allows.								
Grade	Fall NID (Chard et al., 2005)	Fall: +/-1 SD (≈16th%ile to 84th%ile)	Winter NID (Chard et al., 2005)	Winter: +/-1 SD (≈16th%ile to 84th%ile)	Spring NID (Chard et al., 2005)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth	
K	14	0↔28	45	27↔63	56	38↔74	1.31	
1	34	18↔50	53	36↔70	62	46↔78	0.88	

Number Identification (NID): 1 Minute: The student is presented with a randomly generated series of

Source: Chard, D. J., Clarke, B., Baker, S., Otterstedt, J., Braun, D., & Katz, R. (2005). Using measures of number sense to screen for difficulties in mathematics: Preliminary findings. Assessment for Effective Intervention, 30(3), 3-14.

Response to Int

Numberfly Early Math Fluency Generator http://www.interventioncentral.org

Use this free online application to design and create Early Math Fluency Probes, including:

- Quantity Discrimination
- Missing Number
- Number Identification



The application to create CBM Early Math Fluency probes online

Quantity Discrimination (QD) Description: The student is given a sheet of number pairs and must verbally identify the larger of the two values for each pair. Select the lowest and highest numbers to be selected in the quantity-discrimination items: FROM 0 TO 20 How many quantify discrimination items should appear in each row?: How many rows of items should appear on the student worksheet?: Download directions: Download directions for administering and scoring Quantity Discrimination probes, test statistics, & brief guidelines for use in an RTI process 📆 QD Graph: Access a time-series graph to chart student progress using Quantity Discrimination probes

Missing Number (MN)

Description: The student is given a sheet that contains a series of 3- or 4-number sequences. In each sequence, one number is missing. The student must verbally identify the missing number.

FROM	0 🔻	TO 20 ▼
How many missi	ing number items should appe	ear in each row?:
3 ▼	items	

www.intervention

CBM: Math Computation Fluency

 Students should have fluent recall of basicoperation math facts to prepare them for demanding math courses in middle and high school.

Benefits of Automaticity of 'Arithmetic Combinations' (Gersten, Jordan, & Flojo, 2005)

- There is a strong correlation between poor retrieval of arithmetic combinations ('math facts') and global math delays
- Automatic recall of arithmetic combinations frees up student 'cognitive capacity' to allow for understanding of higher-level problem-solving
- By internalizing numbers as mental constructs, students can manipulate those numbers in their head, allowing for the intuitive understanding of arithmetic properties...

Source: Gersten, R., Jordan, N. C., & Flojo, J. R. (2005). Early identification and interventions for students with mathematics difficulties. Journal of Learning Disabilities, 38, 293-304.

 Math Computation Fluency [2 minutes]: The student is given a math-fact worksheet and completes as many problems as possible. The worksheet is scored for number of correct digits.

Example: Student Worksheet Example: Answer Key

62 <u>x11</u>

62 <u>x 11</u> 62 <u>62-</u>

 Math Computation Fluency [2 minutes]: The student is given a math-fact worksheet and completes as many problems as possible. The worksheet is scored for number of correct digits.

Curriculum-Based Measurement: Math Computation (Adapted from Deno & Mirkin, 1977)					
Grade	Digits Correct in 2 Minutes				
1-3	Frustration Instructional Mastery	20 or less 21-40 41 or higher			
4 & Up	Frustration Instructional Mastery	40 or less 41-80 81 or higher			
Camananta, T	,	outation narma are still widely			

Comments: These math computation norms are still widely referenced. They are best regarded as a rough indicator of 'typical' student math computation skills.

Superkids.com Math Worksheet Generators http://www.superkids.com/aweb/ tools/math/

Use this free online application to create CBM timed worksheets for basic math facts.



SuperKids Math Worksheet Creator

Have you ever wondered where to find math drill worksheets SuperKids for free! Simply select the type of problem, the m be used in the problems, then click on the button! A workshe specifications, ready to be printed for use.

- <u>rs</u>
- <u>ps</u>
- ghts

- Addition
- Subtraction
- · Mixed Addition and Subtraction
- Multiplication
- Division

<u>ps</u>

Mechanics & Conventions of Writing

 Tracking student growth in emerging writing skills can be confusing and time-consuming for teachers.

However, Curriculum-Based Measurement-Written Expression (CBM-WE) is an efficient, reliable method of formative student assessment that yields numeric indicators that are instructionally useful--such as total words written, correctly spelled words, and correct writing sequences.

CBM Writing Assessment: Scoring

Total Words:

I woud drink water from the ocean and I woud eat the fruit off of the trees. Then I woud bilit a house out of trees, and I woud gather firewood to stay warm. I woud try and fix my boat in my spare time.

Total Words = 45

 CBM-WE: Total Words Written [4 Minutes]. The student's writing sample is scored for the total words written.

Total Words Written (TWW): This measure is a count of the total words written during the CBM-WE									
assessm	assessment.								
Grade	Fall	Fall:+/-1 SD	Spring	Spring: +/-1 SD	Weekly				
	TWW	(≈16th%ile to 84th%ile)	TWW	(≈16th%ile to 84th%ile)	Growth				
	(Malecki & Jewell,		(Malecki &		(Tadatada, 2011)				
	2003)		Jewell, 2003)						
1	8	3↔13	14	7↔21	0.45				
2	24	14↔34	31	19↔43	0.43				
3	36	23↔49	36	24↔48	0.35				
4	41	30↔52	46	30↔62	0.25				
5	51	34↔68	67	43↔91					
6	44	31↔57	58	44↔72	-				

Source: Gansle, K. A., VanDerHeyden, A. M., Noell, G. H., Resetar, J. L., & Williams, K. L. (2006). The technical adequacy of curriculum-based and rating-based measures of written expression for elementary school students. School Psychology Review, 35, 435-450.

CBM Writing Assessment: Scoring

Correctly Spelled Words:

I woud drink water from the ocean and I woud eat the fruit off of the trees. Then I woud bilit a house out of trees, and I woud gather firewood to stay warm. I woud try and fix my boat in my spare time.

Correctly Spelled Words = 39

 CBM-WE: Correctly Spelled Words [4 Minutes]. The student's writing sample is scored for the number of words spelled correctly.

Correctly Spelled Words (CSW): This measure is a count of correctly spelled words written during the								
CBM-WE assessment.								
Grade	Fall	Fall:+/-1 SD	Spring	Spring: +/-1 SD	Weekly			
	CSW	(≈16th%ile to 84th%ile)	ĊSW	(≈16th%ile to 84th%ile)	Growth			
	(Malecki & Jewell,		(Malecki &		(Tadatada, 2011)			
	2003)		Jewell, 2003)					
1	5	1↔9	10	3↔17	0.45			
2	20	10↔30	27	15↔39	0.46			
3	32	19↔45	33	21↔45	0.37			
4	38	26↔50	44	29↔59	0.26			
5	48	31↔65	65	42↔88	-			
6	42	29↔55	56	41↔71				

Source: Gansle, K. A., VanDerHeyden, A. M., Noell, G. H., Resetar, J. L., & Williams, K. L. (2006). The technical adequacy of curriculum-based and rating-based measures of written expression for elementary school students. School Psychology Review, 35, 435-450.

CBM Writing Assessment: Scoring

Correct Writing Sequences:

I woud drink water from the ocean and woud eat the fruit off of the trees. Then I woud bilit a house out of trees, and I woud gather firewood to stay warm. I woud try and fix my boat in my spare time.

Correct Writing Sequences = 37

• CBM-WE: Correct Writing Sequences [4 Minutes]. A point is scored whenever two adjacent units of writing (e.g., two words appearing next to each other) are correct in punctuation, capitalization, spelling, and syntactical and semantic usage.)

Correct Writing Sequences (CWS): This measure is a tabulation of correct 'writing sequences' written during the CBM-WE assessment. One Correct Writing Sequence is scored whenever two adjacent units of writing (e.g., two words appearing next to each other) are found to be correct in their punctuation, capitalization, spelling, and syntactical and semantic usage.

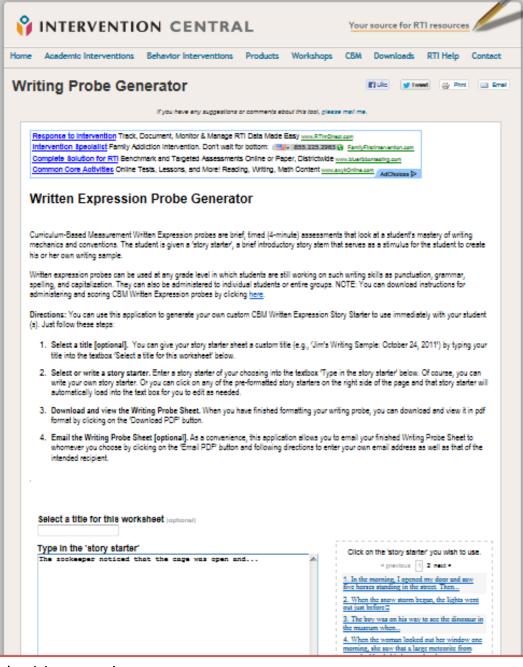
capitalization, spelling, and syntactical and semantic usage.							
Grade	Fall	Fall Fall:+/-1 SD Spring Spring: +/-1 SD		Weekly			
	CWS	(≈16th%ile to 84th%ile)	ĊWS	(≈16th%ile to 84th%ile)	Growth		
	(Malecki & Jewell,		(Malecki &		(Tadatada, 2011)		
	2003)		Jewell, 2003)				
1	2	0↔4	7	1↔13	0.36		
2	15	5↔25	24	11↔37	0.44		
3	28	14↔42	31	18↔44	0.35		
4	38	25↔51	42	26↔58	0.22		
5	46	28↔64	63	40↔86			
6	41	27↔55	54	37↔71			

Source: Gansle, K. A., VanDerHeyden, A. M., Noell, G. H., Resetar, J. L., & Williams, K. L. (2006). The technical adequacy of curriculum-based and rating-based measures of written expression for elementary school students. School Psychology Review, 35, 435-450.

Respons

Writing Probe Generator

Create a probe to assess the mechanics and conventions of student writing.



URL: http://www.interventioncentral.org/tools/writing-probe-generator

Curriculum-Based Measures (CBMs) from Intervention Central CBM Skill Area Activity

Reading Fluency

Comprehension

Number Sense

Math Fact

Mechanics/

Conventions of

Fluency

Writing

Reading

Oral Reading Fluency

Reading

Comprehension

Fluency (Maze)

Early Math Fluency

Computation Fluency

Written Expression

Letter Sound Fluency/Letter Name Fluency	Alphabetics/ Phonics	1 Minute: Student reads letter names or sounds from a randomly generated list.

meaning to the passage.

Number Identification

Writing Sequences.

credit for each correct digit.

1 Minute: Student reads aloud from a text passage.

3 Minutes: Student reads silently from a Maze passage

and selects correct word in each choice item that restores

1 Minute: Student completes an Early Math Fluency probe:

(1) Quantity Discrimination; (2) Missing Number; or (3)

2 Minutes: Student completes math facts and receives

4 Minutes: Student reads a story-starter (sentence stem),

then **produces a writing sample** that can be scored for

Total Words Written, Correctly Spelled Words, Correct

Curriculum-Based Measures (CBMs) from Intervention Central **CBM Activity** Skill Area www.interventioncentral.org Alphabetics/ 1 Minute: Student reads letter names or sounds from a

Select a CBM reviewed at today's training that you

Discuss how you might use that CBM in your own

are interested in using back at your school.

Letter Sound Fluorey/Lotter Name randomly gonorated list Curriculum-Based Measurement: Activity

instruction or share with teachers.

Be prepared to report out.

At your tables:

Written Expression

Fluency

Mechanics/

Writing

Conventions of

Writing Sequences.

credit for each correct digit.

4 Minutes: Student reads a story-starter (sentence stem),

then **produces a writing sample** that can be scored for

Total Words Written, Correctly Spelled Words, Correct

05:00

issage.

re passage

that restores

luency probe:

mber; or **(3)**

d receives

How to Monitor
Student Progress on
Tier 1/Classroom
Interventions



How to Monitor Student Progress on Tier 1/Classroom Interventions pp. 12-20



₩ How to Monitor Tier 1/Classroom Interventions @ 2018 Jim Wright



www.interventioncentral.org

How to Monitor Student Progress on Tier 1/Classroom Interventions

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

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

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

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

Problem-identification Statements: Examples
HOMEWORK. Russell does not turn in homework.
WRITING. Andrea's writing includes many incomplete sentences.
MATH FACTS. Rick is not fluent in multiplication math facts.
BEHAVIOR. Angela is inattentive in large-group instruction.

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

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

Creating a Classroom Progress-Monitoring Plan: 7 Steps

What is the skill or behavior that you are measuring?

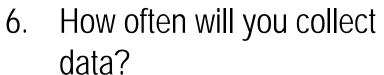


7. How does the student's actual performance compare with the outcome goal?





4. What is the student's baseline performance?





5. What is the student's outcome goal?



STEP 1: What is the skill or behavior that you are measuring? The initial step in setting up your plan to monitor a student is to choose a specific skill or behavior to measure.

This 'problem-identification' statement should define the skill or behavior in clear, specific terms.

Problem-Identification Statements: Examples

HOMEWORK. Russell does not turn in homework.

WRITING. Andrea's writing includes many incomplete sentences.

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

BEHAVIOR. Angela is inattentive in large-group instruction.

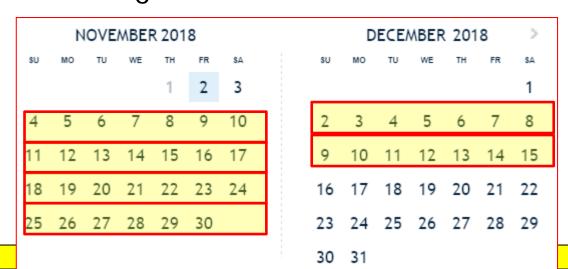


STEP 2: What data-collection method will best measure your target skill or behavior? Your next objective is to select a valid, reliable, and manageable way to collect data on the skill or behavior that you have targeted for intervention. (For a list of assessment tools, see handout; pp. 4-6)

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



STEP 3: How long will your intervention last? When planning your classroom intervention, you should determine an end-date when you can review your progress-monitoring data and decide whether the intervention is successful. A good practice is to run your intervention for at least 6-8 instructional weeks before evaluating its effectiveness.





STEP 4: What is the student's baseline performance? Before launching your intervention, you will first use your selected data-collection tool to record baseline data reflecting the student's current performance in the skill or behavior that you are measuring.

Baseline data represents a starting point that permits you to calculate precisely any progress the student makes during the intervention.

Because student data can vary, you should strive to collect at least 3 baseline data points.

Baseline Bata. Examples		
Problem ID Statement	Sample Data Tool	Baseline Data
HOMEWORK. Russell does not turn in homework.	Homework log	Russell turned in homework on 20 percent of days when homework was assigned. [Data source: percentage homework completion calculated from 1 week of homework log entries.]
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.	On Andrea's writing samples, an average of 40 percent of sentences are found to be incomplete. [Data source: median value of 3 writing samples collected on different days]

Rick calculates an average of 29 correct digits

in 2 minutes on a 0-12 multiplication math-fact

worksheet. [Data source: median value of 3

On a DBRC item "The student requires no more

than 1 redirect for inattention during the class

1 of 5 days (20 percent). [Data source:

period", the teacher rates this item 'YES' during

percentage calculated from 5 days of DBRC

CBM worksheets collected on different

days.]

data collection.]

Curriculum-based

math computation

worksheets

Card

measurement: 2-minute

Daily Behavior Report

Baseline Data: Examples

MATH FACTS. Rick is not fluent.

BEHAVIOR. Angela is inattentive

in multiplication math facts.

in large-group instruction.



STEP 5: What is the student's outcome goal? You will next set an outcome goal that describes how the student is expected to perform on the target skill or behavior if the intervention is successful (e.g., after 6-8 weeks).

S.M.A.R.T. (SMART)

SPECIFIC

MEASURABLE

APPROPRIATE, ACHIEVEABLE, ATTAINABLE

REALISTIC, RESULTS-FOCUSED

TIME-BOUND

Problem ID Statement	Sample Data Tool	Outcome Goal
HOMEWORK. Russell does not turn in homework.	Homework log	Russell will turn in at least 80 percent of assigned homework. [Data source: percentage homework completion calculated from final week of homework log entries.]
WRITING. Andrea's writing includes many incomplete	Writing Sample: Compute percentage of	On Andrea's writing samples, at least 90 percent of attempted sentences will be correct
sentences.	complete sentences.	and complete. [Data source: median value of

Curriculum-based

math computation

worksheets

Card

measurement: 2-minute

Daily Behavior Report

final 3 writing samples]

CBM worksheets.]

of DBRC data collection.]

Rick will calculate an average of 49 correct

digits in 2 minutes on a 0-12 multiplication math-

fact worksheet. [Data source: average of final 2

On a DBRC item "The student requires no more

than 1 redirect for inattention during the class

during at least 4 of 5 days (80 percent). [Data

source: percentage calculated from final 5 days

period", the teacher will rate this item 'YES'

Outcome Goal: Examples

MATH FACTS. Rick is not fluent

BEHAVIOR. Angela is inattentive

in multiplication math facts.

in large-group instruction.



- STEP 5: What is the student's outcome goal? (Cont.) You can use several sources to calculate an outcome goal:
- *CBMs.* If you are using academic CBMs with benchmark norms, those grade-level norms can help you to set a goal for the student.
- Classroom Norms. If you are measuring a skill for which you lack benchmark norms, you may instead be able to compile classroom norms (i.e.., sampling your entire class or a subgroup of your class) and use those group norms to set an outcome goal.
- Teacher-Defined Performance Goal (Criterion Mastery). Sometimes, you must write an outcome goal—but don't have access to benchmark or classroom norms. In this case, you can always use your own judgment to define a meaningful outcome goal: e.g., the student will follow a 7-step process to solve a math word problem.



STEP 5: What is the student's outcome goal? (Cont.)

TIP: For a student with a large academic deficit, you very likely will not be able to close that skill-gap entirely within one 6-8-week intervention cycle.

In this instance, you should instead set an ambitious 'intermediate goal' that will demonstrate that your student is clearly closing the academic gap with peers.

Students with substantial academic delays may require several repeated intervention-cycles with intermediate goals before they can close the skill-gap sufficiently to bring them up to grade-level peers ('final goal').



STEP 6: How often will you collect data? The more frequently you collect data, the more quickly you will be able to judge whether an intervention is effective (Filderman & Toste, 2018). This is because more data points make trends of improvement easier to spot and increase your confidence in the pattern that the data is showing you.

Ideally, you should collect data at least weekly for the duration of the intervention period. If that is not feasible, you will want monitor student progress no less than twice per month.



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

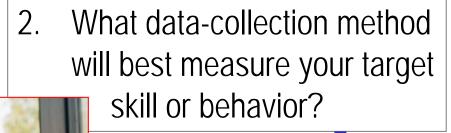


STEP 7: How does the student's actual performance compare with the outcome goal? (Cont.) Here are your outcome decision rules:

- Outcome goal met. If your student meets the outcome goal, the intervention is a success. You can stop the intervention or continue for a time if the student still benefits from it.
- Progress but outcome goal not met. If your student fails to meet the outcome goal, but you see clear signs that the student is making progress, you might decide that the intervention shows promise. Here, your next step would be to alter the existing intervention to intensify its effect: e.g., smaller group size; more frequent meetings).
- Little or no progress observed. If your student does not make progress, you should replace the intervention plan with a new strategy.

Creating a Classroom Progress-Monitoring Plan: 7 Steps

What is the skill or behavior that you are measuring?

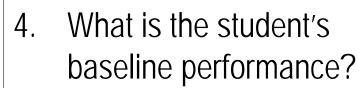


7. How does the student's actual performance compare with the outcome goal?





6. How often will you collect data?





5. What is the student's outcome goal?

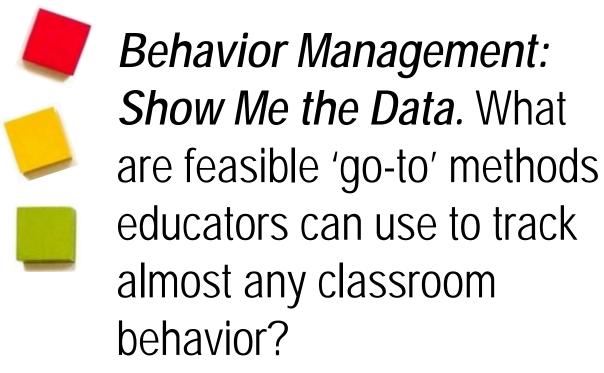
Activity: How to Monitor Classroom Interventions



- Discuss with your team how you could use this 7-step planning framework in your own classroom or school.
- Which step(s) do you believe might be the MOST challenging to implement?









Activity: Think of a student...

- Think of a student whom you work with that displays challenging classroom behaviors.
- Discuss this student with your group.
- Through the rest of this workshop segment on collecting behavioral data, think about how you might use the various assessment methods on this student.





Collecting Behavioral Data: 5 Methods

Behavior Report Cards
Checklists
Behavior Frequency Count



Momentary Time Sampling: Attention Behavior Logs

Classroom Data Tool: Behavior Report Cards

 What It Is: A teacher-created rating scale (see pp. 25-29) that measures student classroom behaviors. A behavior report card contains 3-4 rating items describing goal behaviors. Each item includes an appropriate rating scale (e.g., YES/NO). At the end of an observation period, the rater fills out the report card as a summary snapshot of the student's behavior.

Classroom Data Tool: Behavior Report Card

What It Can Measure:

- ☐General behaviors (e.g., complies with teacher requests; waits to be called on before responding)
- Academic 'enabling' behaviors (e.g., has all necessary work materials; writes down homework assignment correctly and completely, etc.)

Student Name:	Date:
Rater: Wright	Classroom:
Directions: Review each of the Behavior Report Card items below. F behavior or met the behavior goal.	For each item, rate the degree to which the student showed the
Total YES Score: Total NO Score:	

	Language Arts	Math	Science	Social Studies	Study Hall
Follows class rules with no more than 2 rule violations per session.					
Did the student succeed in this behavior goal?	_Y_N	YN	YN	_Y_N	YN
□ YES □ NO					
Completes assignments within the allocated time.					
Did the student succeed in this behavior goal?	YN	YN	YN	YN	YN
□ YES □ NO					
Completes assignments with 80% accuracy.					
Did the student succeed in this behavior goal?	ΥN	YN	YN	ΥN	ΥN
□ YES □ NO					
Complies with teacher requests. (2 or fewer noncompliance per period)					
Did the student succeed in this behavior goal?	YN	YN	YN	YN	_Y_N
□ YES □ NO					

Student Name:		Date:					
Rater: Wright	Classroom:						
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.							
	ollows class olation per	session.					
Did the student succeed in th. □ YES □ NO	Did the student subsect in this			udent succeed in this behavior goal?			
Completes assignments within the a	☐ YES ☐ NO						
time. Did the student succeed in this behavior goal	, _Y_N	YN	YN	YN	YN		
□ YES □ NO							
Completes assignments with 80% accuracy.							
Did the student succeed in this behavior goal	? _Y_N	_Y_N	_Y_N	_Y_N	_Y_N		
Complies with teacher requests. (2 or fewer noncompliance per period)					1		
Did the student succeed in this behavior goal	, _Y_N	YN	_Y_N	_Y_N	_Y_N		

Student Name:		Date:			
Rater: Wright		Classroom:			
Directions: Review each of the Behavior Rebehavior or met the behavior goal. Total YES Score: Total NO Score:		For each item, rate	the degree to whi	ch the student show	wed the
	Language Arts	Math	Science	Social Studies	Study Hall
Follows class rules with no more than 2 rule violations per session.	_				
Did the student succeed in this behavior	us Y N	Y N	Y N	Y N	<u> </u>
Completes assignments within the time. Did the student succeed in YES □ NO Completes assignments with 80%. Did the student succeed in this behave.	completes in ime allocate Did the stud	d. dent succ			
□ YES □ NO					
Complies with teacher requests. (2 or fewer noncompliance per period) Did the student succeed in this behavior gos	V 11	_Y_N	_Y_N	_Y_N	_Y_N
□ YES □ NO					•

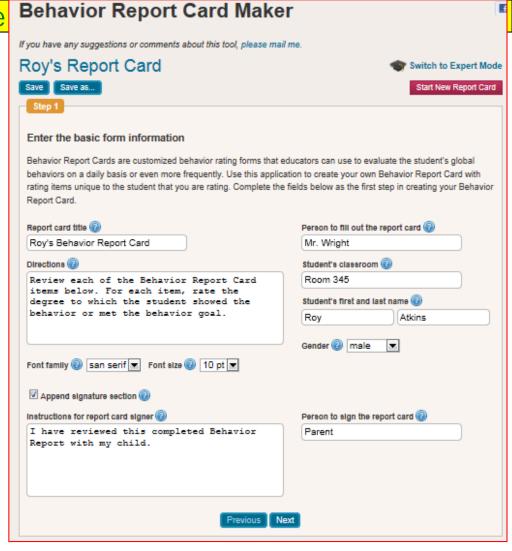
Student Name:		Date:								
Rater: Wright		Classroom:								
Directions: Review each of the Behavior Report Card items below. For each item, rate the degree to which the student showed the behavior or met the behavior goal.										
Total YES Score: Total NO Score:										
	Language Arts	Math	Science	Social Studies	Study Hall					
Follows class rules with no more than 2 rule violations per session.										
Did the student succeed in this behavior goal?	YN	YN	YN	YN	YN					
□ YES □ NO										
Completes assignments within the allocated time.										
Did the student succeed in this behave Completes assignments with at least 80%										
□YES □NO ac	accuracy.									
Completes assignments with 8	•									
Did the student succeed in to	Did the student succeed in this behavior goal?									
□ YES □ NO					_					
Complies with teacher requests. (2 noncompliance per period)	□ YES □ NO									
Did the student succeed in this behavior goal?	YN	YN	YN	YN	tN					
□ YES □ NO										

Student Name:		Date:						
Rater: Wright			Classroom:					
Directions: Review each of the Behavior behavior or met the behavior goal. Total YES Score: Total NO Score:	•	Card items below.	For each item, rate	e the degree to wh	ich the student shov	ved the		
		Language Arts	Math	Science	Social Studies	Study Hall		
Follows class rules with no more than 2 violations per session.	rule							
Did the student succeed in this behavior goal?		YN	YN	YN	YN	YN		
□ YES □ NO								
Completes assignments within the alloc time.	ated							
Did the student succeed in this behavior goal?		YN	YN	YN	YN	YN		
□ YES □ NO								
Completes assignments with 80% acc	Complies with teacher requestsno more than 1 incident of noncompliance per period.							
Did the student succeed in this bel								
□ YES □ NO		oracine or		onance p	er periou.	_		
Complies with teacher requenoncompliance per period)	Did the student succeed in this behavior goal?							
Did the student succeed in this b	□ YES □ NO							

Response

Free Online App: Behavior Report Card Maker.

Teachers can use this free app to create and download (in PDF format) customized Behavior Report Cards.



• What It Is: The dividing of a larger behavioral task or sequence into constituent steps, sub-skills, or components. (See pp. 22-24).

Each checklist element is defined in a manner that allows the observer to make a clear judgment (e.g., YES/NO, COMPLETED/NOT COMPLETED) about whether the student is displaying it.

What It Can Measure:

- ☐ Step-by-step cognitive strategies
- ☐ Behavioral routines
- ☐ Generalization: Target behavior carried out across settings

Checklist Example: Classroom Routine

Start-of-Class Checklist AT THE START OF CLASS, THE STUDENT: has a sharpened pencil. has paper for taking notes. has homework ready to turn in. has put her cell phone away in her backpack. has cleared her desk of unneeded materials. is sitting quietly. is working on the assigned start-of-class activity.

How to Disagree Respectfully
□ Remain calm.
☐ Listen actively and ask clarifying questions.
☐ Think about the other person's point of view.
□ Explain your viewpoint clearly.
☐ Act nonjudgmentally.

Free Online App: **Self-Check Behavior** Checklist Maker. This online tool allows teachers to define student behavior during classroom routines and transitions – a great way to clearly define behavioral expectations.



Activity: Customize a Behavioral Checklist



- Pick a task in your classroom that your student finds challenging, such as:
 - Getting organized at the start of class.
 - Completing an in-class reading assignment.
 - Participating in small-group discussion.
- 2. Use the organizer on p. 24 to write down the steps that make up this larger task to create a behavioral checklist.

Classroom Data Tool: Behavior Frequency Count

 What It Is: In a behavioral frequency count, an observer (e.g., the teacher) watches a student's target behavior and keeps a cumulative tally of the number of times that the behavior is observed during a given period. (See pp. 30-32.)

Behaviors best measured using frequency counts have clearly observable beginning and end points—and are of short duration.

Examples include:

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

Response to Intervention

Classroom Data Tool: Behavior Frequency Count

Behavior Frequency Count pp. 31-32

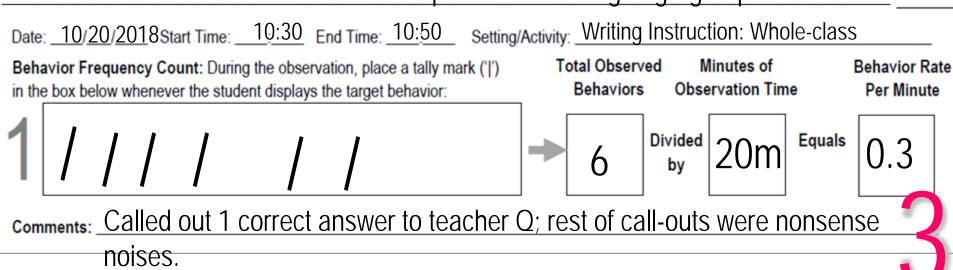
Behavioral Frequency Count/Behavioral Rate Worksheet	
Student: School Yr: Classroom/Course:	
Behavior Definition: Define in clear, measureable, observable terms the behavior that will be measured using the behavioral frequency count (e.g., student call-outs during instructional activities):	
Date: Start Time:: End Time:: Setting/Activity: Behavior Executed Count: During the observation place a talk mark (P) Total Observed Minutes of Behavior	
Deliant reducing a contract of the contract of	inute
1 Divided by Equals	
Comments:	
Behavior Frequency Count: During the observation, place a tally mark (†) Total Observed Minutes of Behavior in the box below whenever the student displays the target behavior: Behaviors Observation Time Per M	
2 Divided by Equals	
Comments:	
Behavior Frequency Count: During the observation, place a tally mark (†) Total Observed Minutes of Behavior in the box below whenever the student displays the target behavior: Behaviors Observation Time Per M	
3 Divided by Equals	
Comments:	

Classroom Data Tool: Behavior Frequency Count

 How to use: The observer watches the student and makes a tally mark for each observed display of the target behavior. At the end of the observation, the observer divides total number of behaviors observed by minutes of observation time to calculate a standardized rate of behavior per minute.

Behavior Definition: Define in clear, measureable, observable terms the behavior that will be measured using the behavioral frequency count (e.g., student call-outs during instructional activities):

The student calls out comments without permission during large-group instruction.



Classroom Data Tool: Behavior Frequency Count

Activity: Think Critically About BFC's

Behavior Frequency Counts are useful when the student's behaviors have clear, observable start and end points and are of short duration.



Because BFCs require direct observation, the quality of information they provide also depends on factors such as where the observer is sitting and whether the student knows that he/she is being observed.

Look over the BFC form (pp. 31-32). Discuss ideas for when and how to use BFCs that will increase the usefulness of their data.

Classroom Data Tool: Momentary Time Sampling

• What It Is: In Momentary Time Sampling (MTS), the observer uses a timer, recording in sequence whether the student displays a specific 'target' behavior (e.g., 'on-task') across a series of fixed intervals (e.g., 15 seconds). (See p. 33.)

At the start of each interval, the observer briefly looks at the student ('momentary time sampling'). If, during that glance, the student displays the target behavior, the observer marks that interval on the observation form. If the student does NOT display the target behavior at the interval onset, the interval is not marked.

During the remainder of the interval, the observer can make observational notes. At the onset of the next interval, the observer repeats the observe-and-record process described above—and continues until the observation period ends.

Response to Intervention

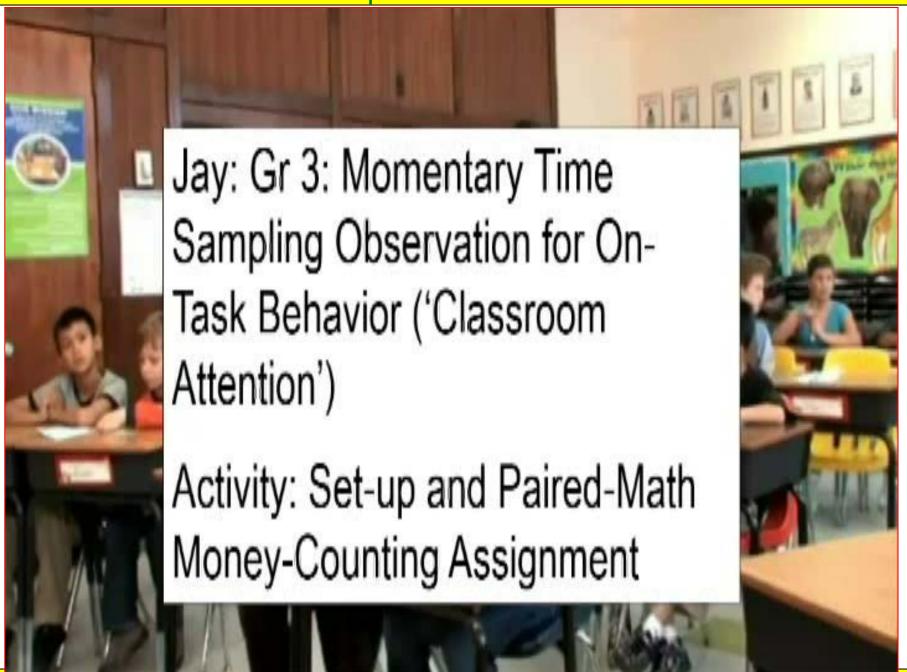
Classroom Data Tool: Momentary Time Sampling

Classroom Attention Observation Form p. 33

1	Studen	t Name:	_												_ Date: _		_
(Observe	er					.ocat	ion:				:	Start Time:		_End Tim	ne:	
	Descript	tion of A	ctivitie	95:													_
a a t n	attendi a mom approx he chi mark tr any stu	ng to la entary imately Id is fou ne inter udent b	arge- time two und t val v ehav	group i -sampl secon to be or vith an viors or	instructing productions in the contraction of the c	tion. One determinent (attendation) the chironne	n-Ta e. At mine ding ild is vent	ask Beh the sta if the c to large off-task s until th	aviori rt of e hild is group (, leav ne ons	s the ach 1 on-ta inst e the et of	only b 5-seconsk or o uction article the ne	ehavio ond int off-task or doi unma ext time	r being r erval, gla during t ng his or rked. The interval.	ance at the the brief her assi en keep	It is cod ne target observat gned sea running i ne obser	led using child for ion. If atwork),	
I	inisne	a, use 1	apie	e 1 bei	OW to	caicula 2	te tn	e stude	ntsum	ne or	itask (B	engag	ea acaae	emic time	;).	5	
sĸ	0:00	0:15	0:30	0:45	1:00	1:15	1:30	1,45	2:00	2:15	2:30	2:45	3:00	3:15 3:30	3:45	4:00 4:15	4:30 4
		6				7				8	_		I	9		10	
sĸ	5:00	5:15	5:30	5:45	6:00	6:15	6:30	6:45	7:00	7:15	7:30	7:45	8:00	8:15 8:30	8:45	9:00 9:15	9:30 9
	11			12 13			3			14		15	5				
	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	13:00 1	3:15 13:3	13:45	14:00 14:15	14:30 14
SK																	
1	Table 1:	Calcula	_			ask Beh	avio	During t		servat	ion Peri	_					
			int	umber of tervals in	1			The TOT	of			form	(in decimal) that the	31		form) that	ercentage the On-Ta
	Type of Task behavior was observe		vior	intervals in the observation period(s)				On-Task behavior occurred during				during the	occurred e observatio				
r	0	N-TASK				Divide by	đ			E	quals	the o	bservation		es 100 =		
[Descrit	be any	nota	ble stu	dent b	ehavio	rs o	r other o	lassro	om e	vents	observ	ed durin	g the ses	sion:		

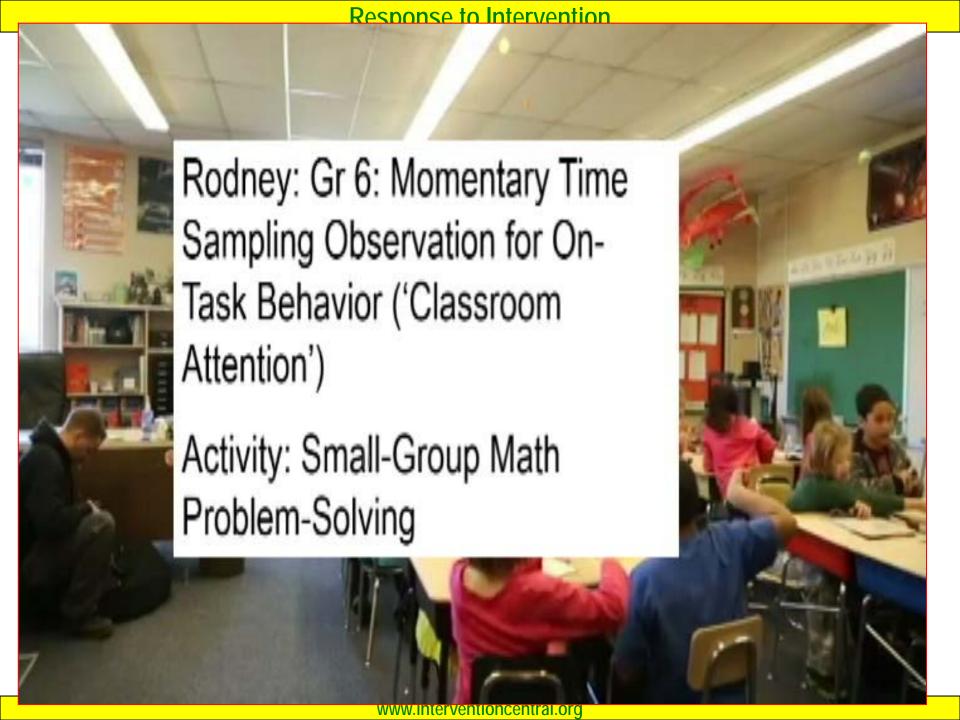
Classroom Data Tool: Momentary Time Sampling

- Review the 'Classroom Attention Observation Form' sheet on p. 33 of your handout.
- Watch the brief video of a classroom observation of a mathpairs activity in a 3rd-grade classroom—and observe how the observation sheet is completed for Jay using a Momentary Time-Sampling approach.
- Discussion: What questions do you still have about using an MTS monitoring format?



Classroom Data Tool: Momentary Time Sampling

- Activity: Part 2: Watch the brief video of a classroom observation (small-group math activity).
- Using your 'Classroom Attention Observation Form' (p. 37), monitor your target student, Rodney, for on-task behavior. (If you have access to a stopwatch, try to use it during this observation.)
- At the end of the observation, you will score the sheet to compute percentage of intervals of on-task behavior for Rodney.
- NOTE: Before beginning, write out a list of what behaviors you would consider to be 'on-task' for small-group cooperative math problem-solving.



Classroom Data Tool: Behavior Log/Scatterplot

 What It Is: Behavior logs are narrative 'incident reports' that the teacher records about problem student behaviors. (See pp. 34-36.) 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.)

Logged behavior incidents can then be plotted on 'scatterplots' to look for connections between student schedule and problem behaviors.

Behavior Log: Sample Form p. 35

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

Classroom Data Tool: Behavior Log/Scatterplot

What It Can Measure:

Behavior logs are often used for teachers to record 'low-incident, high-amplitude' behaviors—that is, behaviors that occur only occasionally but that can disrupt instruction and/or pose a risk to safety (e.g., threats, verbal outburst, tantrum, destruction of property).

Behavior Log: Sample Form

Student Name: <u>Angela H.</u>	Observer:Meredith Z
Time: 11:;40 (a.m.)p.m. Date: 10/20/18 Location: _	Social Studies: Indep Rdng
Brief narrative of incident (including persons involved, scheduled	d activity, triggering event(s), outcome(s));
The class was assigned a short passage to	read and given 10 mins.
Angela sat at her desk but did not begin the	reading. When approached by
the teacher and told to start reading, she refu	used and suddenly left the
room. How long did this incident last? mins	
How severe was the behavior in the incident? 1 Not Sever	2 3 re Somew hat Severe Very Severe

Respo

Behavioral Scatterplot p. 36

Behavioral Scatterplot

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

Time	Activity / Class Schedule	Date/Day	Date/Day	Date/Day	Date/Day	Date/Day
7:30-7:45	Scriedule	+	+	+	1	
7:45-8:00	 					
8:00-8:15	-	+		+		
8:15-8:30	 					
8:30-8:45	 					
8:45-9:00	 					
9:00-9:15	-	+		+		
9:15-9:30	 					
9:30-9:45	 					
9:45-10:00						
10:00-10:15		+	+	+	+	+
10:15-10:30		{				
10:30-10:45	 	{				
10:45-11:00	 					
11:00-11:15		+		+		
11:15-11:30	 					
11:30-11:45	 					
11:45-12:00	 					
12:00-12:15		+		+		
12:15-12:30	 					
12:30-12:45	 					
12:45-1:00	 					
1:00-1:15	 	+	+	+		
1:15-1:30	 					
1:30-1:45	 					
1:45-2:00						
2:00-2:15		+	+	+	+	+
2:15-2:30	 	{				
2:30-2:45	 					
2:45-3:00						
3:00-3:15		+	+	+	+	
3:15-3:30	 					
3:30-3:45	 					
3:45-4:00	 					
4:00-4:15		+	+	+	+	
4:15-4:30	L				L	

Respo

Behavioral Scatterplot

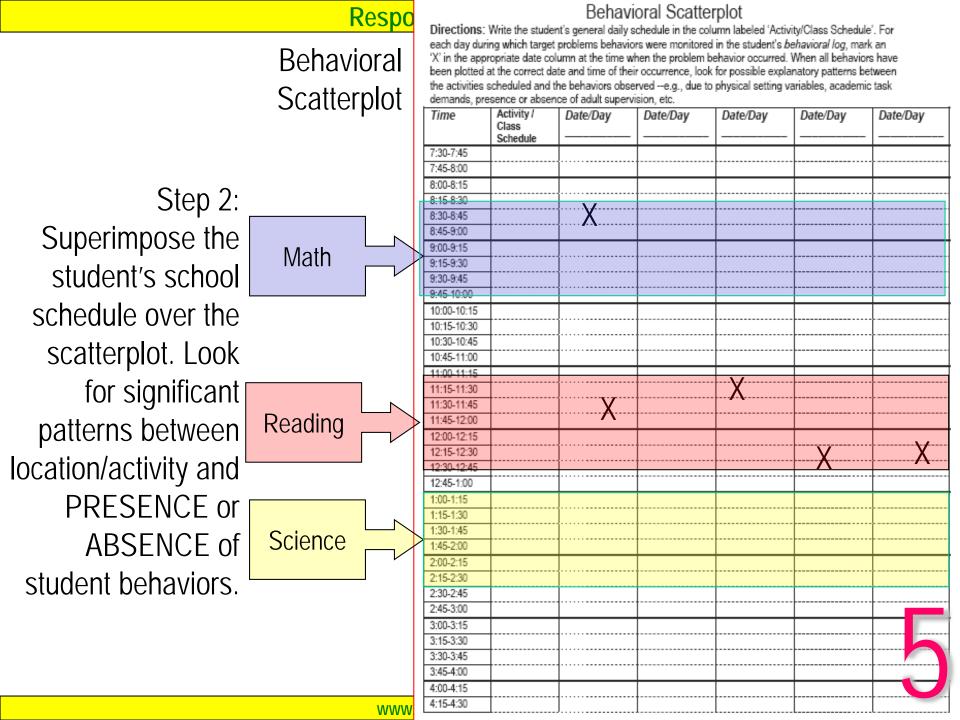
Step 1: Plot Teacher Behavior Log Data onto Scatterplot. (In example, 'X' represents student refusal to comply with teacher request.)

Behavioral Scatterplot

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

		nce of adult supe		to pnysical setting	variables, acaden	IIC Idsk
Time	Activity / Class Schedule	Date/Day	Date/Day	Date/Day	Date/Day	Date/Day
7:30-7:45						
7:45-8:00	T					
8:00-8:15						
8:15-8:30	T	1				
8:30-8:45	<u> </u>	X				
8:45-9:00						
9:00-9:15						
9:15-9:30	<u> </u>					
9:30-9:45	T					
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10:30-10:45						
10:45-11:00						
11:00-11:15				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
11:15-11:30				X		
11:30-11:45		X				
11:45-12:00						
12:00-12:15						
12:15-12:30					Y	X
12:30-12:45						
12:45-1:00						
1:00-1:15						
1:15-1:30						
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3:45-4:00						
4:00-4:15						
4:15-4:30	T	1				

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Classroom Data Tool: Behavior Log/Scatterplot

Activity: Design Your Own Behavior Log

- Review the sample behavior log form on p. 35.
- What recommendations do you have to improve the design of this log form?



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

5

Assorted Academic Data Tools. What are 4 additional teacher-friendly ways to monitor student academic performance?



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

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

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

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

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

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

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

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

Data Tool	What It is	What It Can Measure
Archival Data	Existing data routinely collected by schools that provides useful ongoing information about the student's academic or behavioral performance.	Attendance Office disciplinary referrals Other aspects of behavior or academic performance captured in the school database

Classroom Data Tools pp. 4-6

Classroom Data Collection: 4 'Channels' (p. 4)

While there are many ways to collect data to monitor student academic performance, virtually all information is gathered through one of four general 'data channels':

 Direct observation. The evaluator watches the student engaged in the academic task and records significant behaviors observed during that observation.

Direct observation is useful to verify that the student uses the correct skills in the correct sequence at the correct time.

Classroom Data Collection: 4 'Channels'

While there are many ways to collect data to monitor student academic performance, virtually all information is gathered through one of four general 'data channels':

 Interviews. The evaluator talks with the student and/or adults familiar with the student to collect useful information about the student's academic performance.

Interviews are ideal to access information not otherwise easily available: e.g., having the student recite steps followed while solving a math problem; talking with a parent about a student's homework session.

Classroom Data Collection: 4 'Channels' (Cont.)

3. Work products. The evaluator reviews completed student work (e.g., in-class or homework assignments, quizzes and tests, etc.) to draw conclusions about that student's academic performance.

Work products provide evidence of the student's use of specific problem-solving or other strategies and can verify whether the learner is applying skills independently ('generalization' measure).

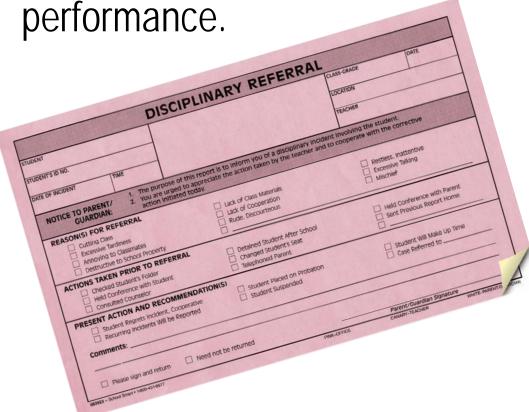
Classroom Data Collection: 4 'Channels' (Cont.)

4. Self-monitoring. The student collects information about his or her own academic performance and shares that data with the evaluator.

Self-monitoring allows the student to note and record information hidden to others, including attentional focus, problem-solving steps followed during independent work, etc.

Classroom Data Tool: Archival Data

 What It Is: Existing data routinely collected by schools that provides useful ongoing information about the student's academic or behavioral performance



Classroom Data Tool: Archival Data

What It Can Measure:

- ■Attendance
- □Office disciplinary referrals
- □Other aspects of behavior or academic performance captured in the school database

Classroom Data Tool: Grades

 What It Is: Represents in letter or number form the teacher's formal, summary evaluation of the student's academic performance on an assignment, quiz, test, or longer span of evaluation.



Classroom Data Tool: Grades

What It Can Measure:

■ Academic Performance

Classroom Data Tool: Grades

Grades as Progress-Monitoring Tools

Grades can be optimized in 2 ways to monitor interventions:

Revise grading to yield a 'pure' measure of academic performance. One trick for making grades a data source capable of reliably tracking the impact of an intervention is to partition the global grade into academic and nonacademic components. The teacher then has the option to average the two components to calculate a composite grade. The advantage of this approach is that the instructor can use just the academic grade as a 'pure' measure of the student's actual performance.

Classroom Data Tool: Grades



Grades as Progress-Monitoring Tools

Grades can be optimized in 2 ways to monitor interventions:

Increase frequency of grading opportunities. The power of grades as a data source increases significantly when opportunities for grading occur more often (Weinstein & Wu, 2009). Collect relevant gradable student work at least weekly to provide grading information sufficient to evaluate ongoing growth in performance. This frequency results in the teacher's ability to have a real-time sense of academic performance across the entire class (allowing reteaching if needed), and to track short-term improvements in course performance for specific students.

Classroom Data Tool: Grades

Grading Example: Comprehension: Measuring retention of assigned readings.

Readiness Assessment Tests (RATs). RATs are brief teacher-made assignments that students complete after reading but before that reading is reviewed in class (Weinstein & Wu, 2009). The teacher identifies the most relevant information from the assigned reading and constructs a few questions (e.g., 5) to test that knowledge.

The instructor selects the RAT-question format: short-answer; essay; multiple-choice, or any combination.

Response to Intervention

Readiness Assessment Tests (RATs): Sample Questions.

Multiple Choice.

A solar eclipse occurs when:

- A. the sun cools and dims.
- B. the moon passes between the earth and sun.
- C. the earth spins on its axis.
- D. the earth blocks moonlight.

Short Answer.

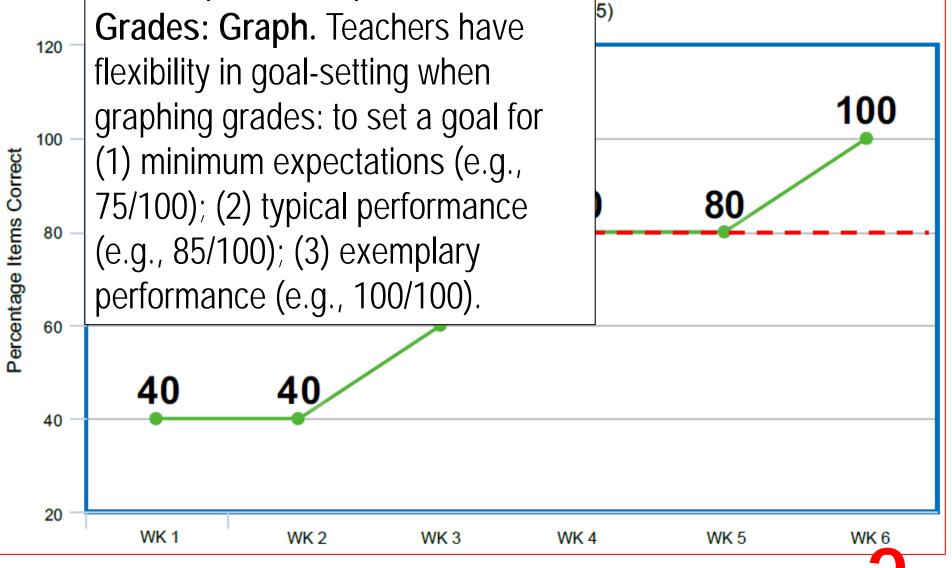
A solar eclipse occurs when the _____ passes

between the _____ and sun.

Essay

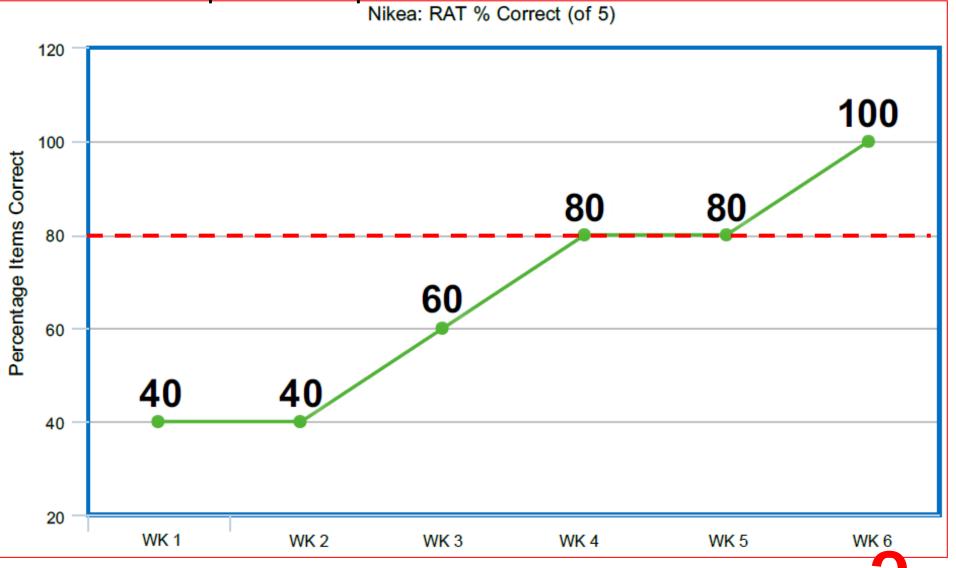
Write a brief essay explaining the cause of a solar eclipse.

Grades Graph: Example



Response to Intervention

Grades Graph: Example



Classroom Data Tool: Rubric

 What It Is: An instrument designed to measure a student on complex tasks.

In a rubric, the teacher defines the categories that make up the important dimensions of a task, develops written exemplars representing mastery for each dimension, and creates a rating scale to be used in evaluating a particular student's work for each dimension.

a. Preparesfordiscussion

tion Center

JS: K-5

for Best Practices & Council of Chief State School Officers. (2010). Common core state standards for English language arts and literacy in history/social studies, science, and technical subjects. Washington, DC: Authors. Retrieved from http://www.corestandards.org/ p. 24

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
 - d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

CCSS: ELA: Speaking & L b. Fulfills assigned for discussion for hii role(s) and suffice follows rules Retrieved p. 24

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
 - d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

c. Engages in Q&A turntaking and contributes ideas to for English language arts and literacy in

history/social studies, science, and technical

from http://www.corestandards.org/ p. 24

subjects. Washington, DC: Authors. Retrieved

fo

king &

ls: K-5

- 1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
 - Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

d. Reviews
discussion
content to
summarize king &
learning,
draw
conclusions

history/social studies, science, and technical subjects. Washington, DC: Authors. Retrieved from http://www.corestandards.org/ p. 24

So fo

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - Follow agreed-upon rules for discussions and carry out assigned roles.
 - c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
 - d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

	Analytic Rubric: 'Student Discussion Group' Example			
	Task: The student will take part in weekly in-class collaborative peer discussions of assigned readings, contributing ideas and responding appropriately to the ideas of others (from CCSSELA.5.SL.1).			
	Dimensions	Needs Work (1-3 pts)	Competent (4-6 pts)	Exemplary (7-9 pts)
	Preparation	Has not completed the	Has completed the	Has completed the
		assigned readings and/or	assigned reading(s) and	assigned reading(s), brings
		does not bring notes of	brings notes of the	notes of the readings to the
		the readings to the discussion	readings to the discussion.	discussion, and gives evidence of having done
		uiscussion		additional reading/research
				in the discussion topic.
	Compliance With	Fails to follow the rules	Follows the rules set up for	Follows the rules set up for
5	Discussion	set up for the discussion	the discussion activity.	the discussion activity.
Rubric:	Rules/Roles	activity and/or does not	When assigned a role in	When needed, reminds
Cyampla		adequately carry out the responsibilities of an	discussion, adequately carries out the	others to adhere to discussion rules. When
Example		assigned discussion role.	responsibilities of that role.	assigned a formal role
		assigned disoussion role.	responsibiliaes of that role.	(e.g., discussion leader),
				fully carries out the
				responsibilities of that role.
	Contribution to	Does not actively sustain	Poses questions relevant	Participates fully in the
	Discussion	his or her part in the	to the discussion topic and	discussion. Poses
		discussion. May pose questions of limited	responds appropriately to the comments of others.	questions relevant to the
		relevance to the	Remarks display a	discussion topic and responds appropriately to
		discussion topic. May not	willingness to acknowledge	
		respond appropriately to	the contributions of others	Remarks display a good
		the comments of others.	in the discussion group,	grasp of the topican a
				willingness to acknowledge
				the contributions of others
				in the discussion group,

Response to Intervention

Sample Retell Rubric

MLPP RETELLING RUBRIC K - 12 INFORMATIONAL TEXT

Qualities of Retelling	4 Mature	3 Capable	2 Developing	1 Beginning
Central Purpose/Gist	Retelling indicates a clear and elaborated understanding of the central purpose of the selection.	Retelling indicates a basic understanding of the central purpose of the selection.	Retelling indicates an incomplete or inaccurate understanding of the central purpose of the selection.	Retelling indicates no understanding of the central purpose of the selection.
Restatement/ Elements	Retelling contains a clear and accurate restatement of important and supporting elements. May contain related prior knowledge.	Retelling contains a clear and accurate restatement of most important and supporting elements.	Retelling lacks important elements and/or contains inaccurate information.	Retelling is minimal and inaccurate.
Organization	Important and supporting elements are logically presented and clearly connected.	Most important and supporting elements are presented logically and connected.	Elements are presented in a random or disconnected order.	There is little or no development of elements.
Linguistic Spillover	Use of language, conventions, and/or format from the selection reflects an elaborated and personalized understanding of the information.	Use of language, conventions, and/or format from the selection indicates basic understanding of the information.	Use of language, conventions, and/or format from the selection may indicate superficial understanding.	Retelling includes little or no use of language, conventions, and/or format from the selection.

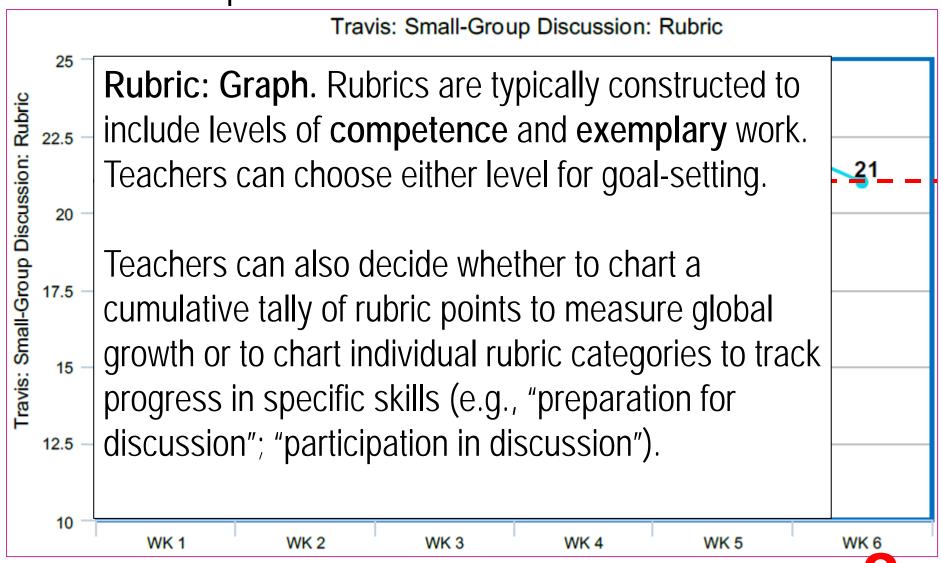
<u>3</u>

Classroom Data Tool: Rubric

What It Can Measure:

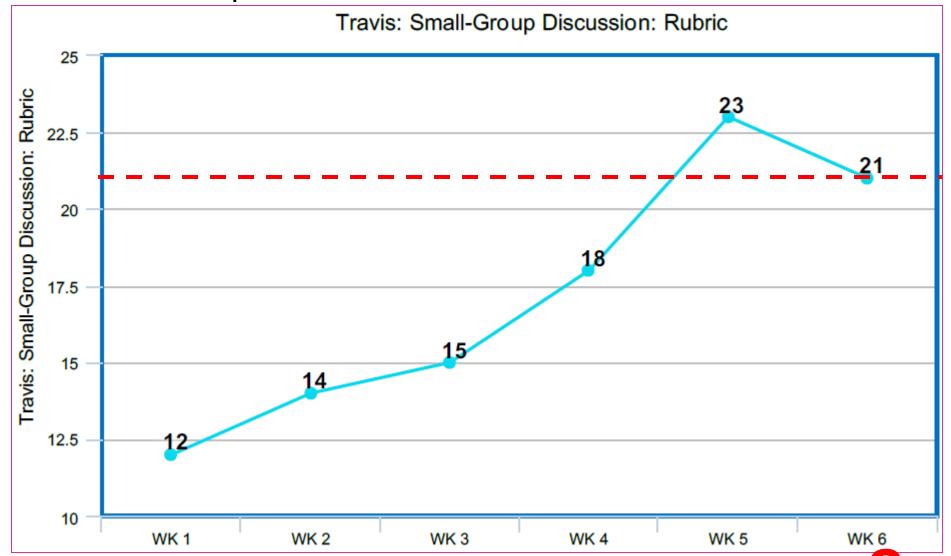
- ☐ Any complex, multi-dimensional task, such as:
 - ✓ participation in a discussion;
 - ✓ writing a research paper;
 - ✓ preparing and presenting a PowerPoint;
 - completing and documenting a science lab project.

Rubric: Example



Response to Intervention

Rubric: Example



What It Is: Student work that reflects performance on a series of similar in-class or homework assignments (e.g., successive writing assignments or ongoing math homework).

A work product is selected because it can reflect growth in the intervention target skill(s). The element(s) of the work product being tracked can be objectively measures and converted to numeric data (e.g., percentage of problems completed).

What It Can Measure:

- Work completion
- Work accuracy
- Written evidence of problem-solving steps
- ☐ Quality of student work (e.g., on writing assignments)



 Converting Work Products from Artifact to Data: Tutorial:

Teachers can find many inventive ways to convert work products into objective data. Here are some ideas to get started:

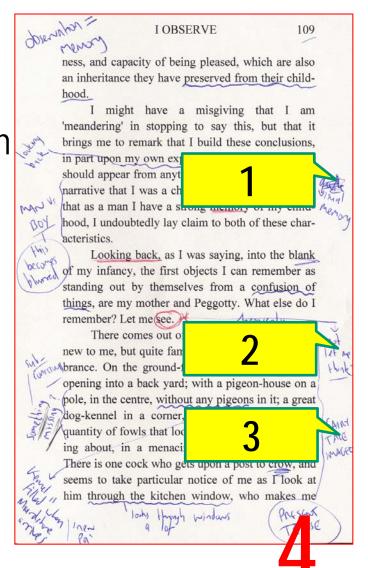
1. Work Accuracy: Percentage. Tracks the accuracy of student work containing a finite number of items, such as math number problems or end-of-chapter questions. Compute by dividing the number of correct answers by the total number of assigned items.



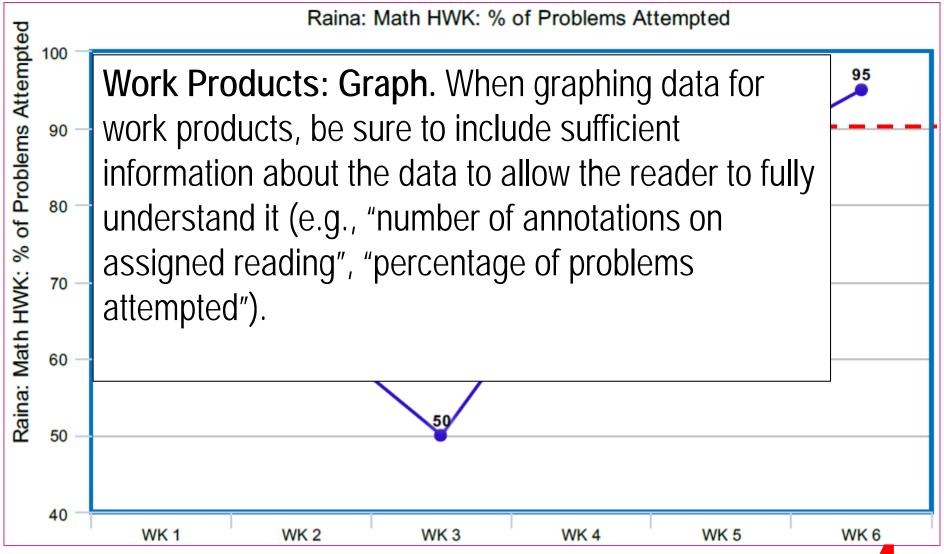
- Converting Work Products from Artifact to Data: Tutorial:
- 2. Work Attempted: Percentage. Measures effort on student work containing a finite number of items. Calculate by dividing the number of items attempted (whether correct or not) by the total number of items.
- 3. Work Time: Time Log. Indicates the amount of time required to complete the assignment. Compute by (1) having the student or teacher record the student's start and end time in working on the assignment and then (2) calculating the number of elapsed minutes.

Work products. Example.

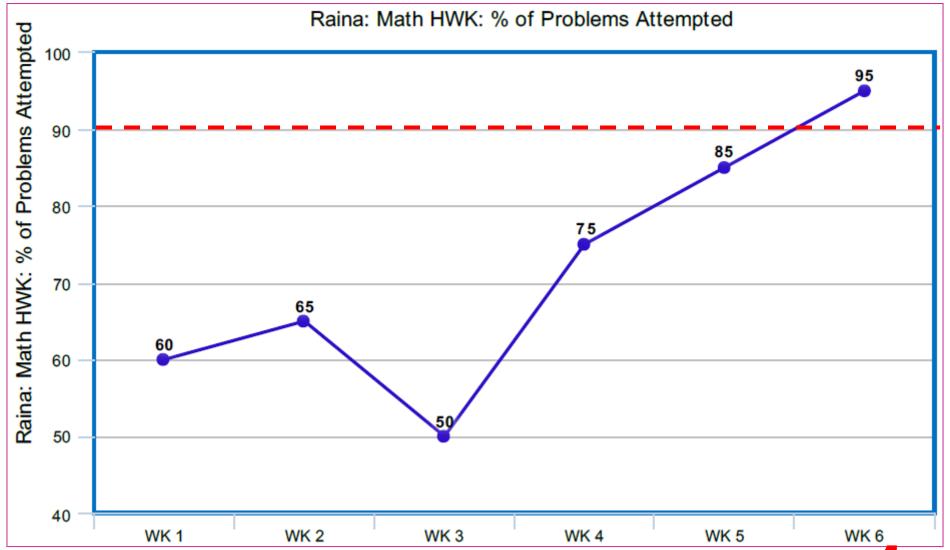
 Text annotation. Students can increase their retention of information when they interact actively with their reading by jotting comments in the margin of the text (Sarkisian et al., 2003).



Work Products: Example



Work Products: Example



Classroom Data Tools: Activity

05:00

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Look over the range of classroom data tools listed on pp. 4-6.

Discuss how you might use these resources and ideas as a starting point to build a classroom or school-wide 'data collection' toolkit.

Data Collection: How to Monitor Classroom Interventions © 2018 Jim Wright 🗳 www.interventioncentral.org



Classroom Data Tools: What Are They and What Can They

When a teacher wants to monitor a student's progress on a classroom academic intervention, the instructor will (1) decide what data 'channel' to use to collect that data, and then (2) select a data tool designed to

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

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

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

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

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

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

Data Tool	What it is	What It Can Measure
Archival Data	Existing data routinely collected by schools that provides useful ongoing information about the student's academic or behavioral performance.	Attendance Office disciplinary referrals Other aspects of behavior or academic performance captured in the school database

Ask the right questions. What question(s) do you want your data collection to answer?



Handout: pp. 7-8

Respon Progress-Monitoring Questions: How Do I Measure...?

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

Assessment Questions: How do I measure if the	Suggested Methods of Progress-Monitoring
student	Constation Manters Property This assessment in an inchia such as the
 is becoming more accurate in an academic skill (goal: 	 Cumulative Mastery Record: This approach is suitable when the student is mastering a fixed set of items (e.g., biology
accuracy only)?	vocabulary; multiplication math facts 0-12).
,,	Observation/Log: The teacher observes and records instances
	of successful student performance.
	Work product: The teacher examines student work and records
	the number/percentage of items correct.
 is developing fluency in an academic skill (goal: 	Curriculum-based measures: CBMs are a good choice for rote Total fine purpose and fine fine purpose are a good choice for rote
academic skill (goal: accuracy plus speed)?	basic skills such as reading fluency, or math fact fluency. Other timed measures: Teachers can create their own timed
cooling plus speed):	proficiency assessments—that assess work efficiency by
	measuring accurate responding within pre-set time limits (e.g.,
	running record).
 is increasing comprehension 	 Grades: Assignments or quizzes are structured to assess
of independent reading?	student comprehension of assigned readings and collected with
	sufficient frequency to capture evidence of short-term improvements.
	Work product: Short-answer questions. The teacher prepares
	questions suitable for assessing student comprehension of the
	reading (e.g., mix of factual and inferential questions). Question
	sets can be assigned as homework or included in quizzes.
	 Work product: Written retelling. The student is assigned to summarize important points of assigned readings ('written
	retellings'); the teacher tabulates the number/percentage of 'key
	ideas' or concepts included in the retelling.
 is mastering a multi-step 	Checklist: The teacher or student uses a checklist to verify steps
cognitive strategy or	of the strategy successfully completed.
behavior routine?	Work product: The student is directed to show work on
	assignment, e.g., perhaps assisted by visual organizers or other
	aids highlighting strategy steps. The teacher reviews completed work for evidence of strategy use.
	Observation/interview: An adult observes the student during the
	activity to record (perhaps with the help of a checklist or
	behavior report card) those steps successfully carried out. The
	observer may also ask the student to describe the steps being followed.
 is turning in homework or in- 	Log: The teacher keeps a record of homework turned in.
class assignments with	
greater frequency?	



Problems are an unacceptable discrepancy between what is expected and what is observed.

99

-Ted Christ

Monitoring student progress: How do I measure if the student...

- is becoming more accurate in an academic skill (goal: accuracy only)?
- is developing fluency in an academic skill (goal: accuracy plus speed)?

is turning in homework or in-class assignments with greater frequency?

- is increasing comprehension of independent reading?
- is increasing comprehension or independent reading:
- is mastering a multi-step cognitive strategy or behavior routine?
- produces work of higher quality?
- is increasing on-task behavior and academic engagement?
- is better able to organize and implement steps necessary to complete an in-
- class or homework assignment?
 transfers an existing skill or strategy to new settings or situations (goal:
- generalization)?improves compliance with behavioral expectations?
- improves overall academic standing in the course because of academic interventions?

Your Data Questions Drive Choice of Assessment...

- Look over the sample data questions on pp. 7-8.
- How could your school use a 'questiontable' like this to demystify data collection? (For example, a school psychologist or special educator could use this handout to 'walk' a generaleducation teacher through the process of picking a suitable data-collection method for a student.)



Workshop Topics

- 1. Reviewing 'Big Ideas'. What are important concepts relating to data collection?
- 2. Creating a Monitoring Plan. What are the 7 steps to creating a plan to monitor a student's intervention progress?
- 3. Data Collection: Behavior. What tools are best to collect reliable behavioral data?
- 4. Data Collection: Academics. How can Curriculum-Based Measurement and other data tools help schools to track academic performance?
- 5. Documenting Progress-Monitoring Plans. What is a simple format to put student monitoring plans in writing?

MTSS and Behavior: Resources

Jim Wright www.interventioncentral.org





Response to Intervention



RTI/MTSS Toolkit: A Practical Guide for Schools

Managing Classroom Behaviors:

A Toolkit

Jim Wright, Presenter

Email: jimw13159@gmail.com

Workshop Downloads at: http://www.interventioncentral.org/positivebehavior

Workshop PPTs and handout available at:

http://www.interventioncentral.org/positivebehavior

Response to Intervention



RTI-Behavior Needs **Assessment**. What issue(s) relating to student behavior and social-emotional functioning present the greatest challenge(s) to your school?





RTI-B Needs Assessment: Rationale

 Schools have limited resources to implement RTI for behavioral and social-emotional issues.

They should, therefore, conduct an RTI-Behavior needs assessment to better understand what goals to work toward, how to allocate their limited resources, and how to prioritize their efforts.

RTI-B: Issues in Behavioral and Social-Emotional Functioning

- Disruptive Classroom Behaviors. Problem behaviors in the classroom commonly interfere with effective instruction.
- 2. Bullying. Bullying and related hidden ('covert') student behaviors create an emotionally unsafe atmosphere for a substantial number of learners.



RTI-B: Issues in Behavioral and Social-Emotional Functioning

- 3. Motivation. Limited student motivation interferes significantly with academic performance and learning.
- 4. 'High-Amplitude' Behaviors. A small number of students with more severe behaviors ties up a large share of school support and intervention resources.

RTI-B: Issues in Behavioral and Social-

Emotional Functioning

- 5. Variability of Behavior-Management Skills.
 - Teachers and other educators (e.g., paraprofessionals) vary in their knowledge of-and/or willingness to implement--positive behavior management practices.
- 6. Inconsistency in Supporting Students with Intensive Needs. For students with more significant challenging behaviors, there are disconnects across staff, problem-solving groups, and time. These disconnects result in lack of coordination, communication, and consistent delivery of behavior-support services.

RTI-B: Issues in Behavioral and Social-Emotional Functioning

- 7. Differing Philosophies about Behavior Management. Staff are divided between 'reactive/punitive' and 'pro-active/positive' viewpoints about how to manage student misbehavior.
- 8. No Decision Rules for Behavioral 'Non-Responders'. The district has no formal guidelines for judging when a general-education student on a behavior-intervention plan is a 'non-responder' and may require special education services.

RTI-B: Issues in Behavioral and Social-Emotional Functioning

- 9. No Data on Behavioral Interventions. Staff lack an understanding of how to set goals and what data to collect when monitoring student progress on behavioral interventions.
- 10. Vague Descriptions of Student Problems. Educators find it difficult to define a student's primary behavior problem in clear and specific terms: "If you can't name the problem, you can't fix it."

Activity: Behavior Needs Assessment

- In your groups:
 - Discuss these 10 behavioral needsassessment items with your team (pp. 33-34)
- CIRCLE the TOP 2-3 items from this list that you feel MOST impact your school or district.

Behavioral Needs-Assessment Items:

- Disruptive Classroom Behaviors
- Bullying
- - 05:00 3. **Limited motivation High-Amplitude Behaviors** 4. www.interventioncentral.org
- Variability of Behavior Management Skills 5.
- Inconsistency in Supporting Students with Intensive Needs
- 7. Differing Philosophies About Behavior Management
- 8. No Decision Rules for Behavioral 'Non-Responders'.
- No Data on Behavioral Interventions 9.
- 10. Vague Descriptions of Student Problems

Response to Intervention

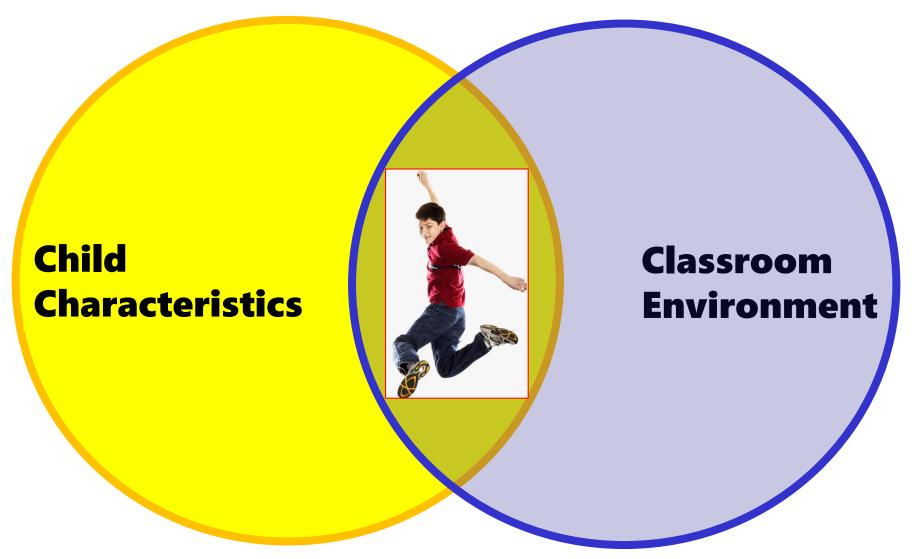


Big Ideas in Behavior Management.



What key concepts can lay the groundwork for teacher success in managing challenging behaviors? (Handout 2; pp. 2-3)

Behavior in the Classroom: A Product of...



Source: Farmer, T. W., Reinke, W. M., & Brooks, D. S. (2014). Managing classrooms and challenging behavior: Theoretical considerations and critical issues. Journal of Emotional and Behavioral Disorders, 22(2), 67-73.

Teach expected behaviors. Students need to be explicitly taught expected behaviors. They should then be acknowledged and reinforced when they show positive behaviors.

In other words, schools should treat behavior as part of the curriculum: teach it and reinforce it!

Check for academic problems. The connection between classroom misbehavior and poor academic skills is high.

Educators should routinely assess a student's academic skills as a first step when attempting to explain why a particular behavior is occurring.

If academics contribute to problem behaviors, the student needs an academic support plan as part of his or her behavior plan.

Identify the underlying function of the behavior.
Problem behaviors occur for a reason. Such behaviors serve a function for the student.

When an educator can identify the probable function sustaining a student's challenging behaviors, the educator can select successful intervention strategies that match the function—and meet the student's needs.

Problem Behaviors: Common Reasons

SKILL DEFICIT. The student lacks the skills necessary to display the desired behavior (Gable et al., 2009).

• PEER ATTENTION. The student is seeking the attention of other students

- **PERFORMANCE DEFICIT.** The student possesses the skills necessary to display the desired behavior but lacks incentive to do so (Gable et al., 2009).
- ACCESS TO TANGIBLES/ EDIBLES/ACTIVITIES. The student seeks access to preferred objects ('tangibles'), food, or activities (Kazdin, 2001).
- (Packenham, Shute & Reid, 2004). **ADULT ATTENTION.** The student is seeking the attention of adults (Packenham,
- Shute & Reid, 2004). **ESCAPE/AVOIDANCE**. The student is seeking to escape or avoid a task or situation
- (Witt, Daly & Noell, 2000). **EMOTIONAL or ATTENTIONAL BLOCKERS**. The student possesses the skills to display the desired behavior "but is unable to deal with competing forces—anger, frustration, fatigue." (Gable et al., 2009; p. 197). (This category can also include symptoms associated with anxiety or ADHD.)

Eliminate behavioral triggers. Problem behaviors are often set off by events or conditions within the classroom.

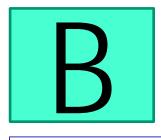
Sitting next to a distracting classmate or being handed an academic task that is too difficult to complete are two examples of events that might trigger student misbehavior.

When the educator is able to identify and eliminate triggers of negative conduct, such actions tend to work quickly and--by preventing class disruptions--result in more time available for instruction.

ABC Timeline: Antecedent-Behavior-Consequence











Antecedents. Stimuli, settings, and contexts that occur *before* and influence ('trigger') behaviors.

Behaviors.
Observable acts
carried out (or not
carried out) by
individuals.

Consequences. Events that *follow* behavior and may include influences that increase, decrease, or have no impact on the behavior.

Examples.

- Instructions
- Gestures
- Looks from others

Examples.

- Engaging in classwork
- Calling out
- Not doing homework

Examples.

- Teacher praise for student behavior
- Loss of free time for non-compliance

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

Focus on factors within the school's control. Educators recognize that students often face significant factors outside of the school setting--e.g., limited parental support -- that can place them at heightened risk for academic failure and problem behaviors.

Schools can best counteract the influence of negative outside factors and promote student resilience by focusing on what can be provided *within* the educational setting such as skills instruction, tutoring, mentoring, and use of positive behavior management strategies.

Be flexible in responding to misbehavior. Educators have greater success in managing the full spectrum of student misbehaviors when they respond flexibly--evaluating each individual case and applying strategies that logically address the likely cause(s) of that student's problem conduct.



Response to Intervention

Building the Behavior/Social-**Emotional Toolkit.** What are research-based strategies that can help teachers to motivate students and decrease problem behaviors?



Behavior Toolkit (Handout 2; pp. 9-18)

A Toolkit: 38 Classroom Ideas to Help Students to Make Better Behavioral Choices

Behavior intervention plans are highly individualized—because every student displays a unique profile of behaviors. However, teachers will find that their chances of helping a student to engage in positive behaviors increase when they include each of these 3 elements in their classroom behavior intervention plans:

- Antecedents: Strategies to promote positive behaviors and prevent misbehavior
- 2. Positive consequences: Responses that increase positive/goal behaviors
- 3. Extinction procedures: Responses that extinguish problem behaviors

Every one of these elements plays a crucial role in promoting the success of a behavior plan. Antecedent strategies prevent the student from engaging in problem behaviors in the first place. Positive consequences motivate the student to show desired behaviors, such as academic engagement. Extinction procedures remove the 'pay-off' to the student for engaging in problem behaviors. While any one of the elements might be inadequate to change the student's behavior, the combination of antecedents, positive consequences, and extinction procedures can result in a strong, flexible plan and successful intervention outcome.

Teachers can use this guide to build their own behavior plans using its research-based ideas for antecedents, positive consequences, and extinction procedures.

Antecedents: Strategies to Prevent Misbehavior

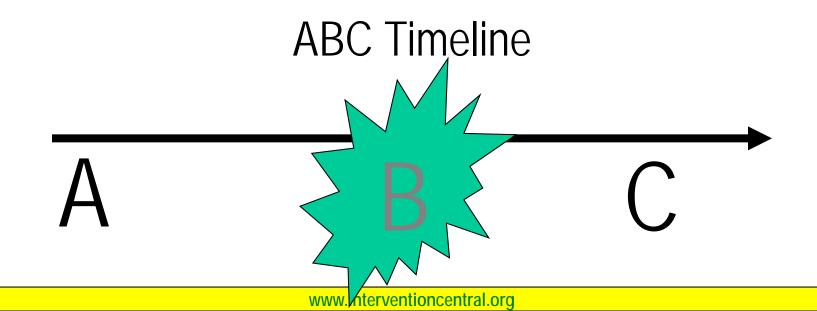
Teachers have the greatest array of options to influence a student to engage in positive behaviors when they focus on antecedents: actions they take before the student behavior occurs. Proactive antecedent actions to encourage desired behaviors are often quick-acting, can prevent misbehavior and attendant interruption of instruction, and usually require less teacher effort than providing corrective consequences after problem behaviors have occurred. Teacher strategies to elicit positive student behaviors include making instructional adjustments, providing student prompts and reminders, and teaching students to monitor and evaluate their work performance. Here are specific antecedent ideas that teachers can use to 'nudge' students to engage in desired behaviors:

Antecedents That Prevent Problem Behaviors

- Behaviors: Teach Expectations (Fairbanks, Sugai, Guardino, & Lathrop, 2007). Students must be explicitly taught behavioral expectations before they can be held accountable for those behaviors. The teacher should model positive behaviors, give students examples and non-examples of appropriate behaviors to clarify understanding, have students practice those behaviors with instructor feedback; and consistently acknowledge and praise students for successfully displaying positive behaviors.
- Instructional Match: Ensure the Student Can Do the Work (Burns, VanDerHeyden, & Boice, 2008). Student misbehavior frequently arises from an inability to do the academic task. When the student lacks skills necessary for the academic task, the instructor teaches the necessary skill(s). Additional strategies include adjusting the immediate task to the student's current skill(s) and pairing the student with a helping peer.

ABC Time-line

The ABC (Antecedent-Behavior-Consequence) timeline shows the elements that contribute to student behaviors: (a) the Antecedent, or trigger; (b) the student Behavior; and (c) the Consequence of that behavior.



Extinction Procedures: REDUCE or ELIMINATE Behaviors

Planned Ignoring: Turn Off the Attention (Colvin, 2009). In planned ignoring, the instructor withholds attention when the student engages in the problem behavior. Ignoring problem behavior can remove the source of its reinforcement and thus help to extinguish it.

Teachers should remember, though, that planned ignoring alone is seldom successful. Instead, planned ignoring becomes much more powerful when, at the same time, the teacher provides regular attention whenever the student engages in positive, replacement behaviors.

Positive Consequences: INCREASE Positive/Goal Behaviors

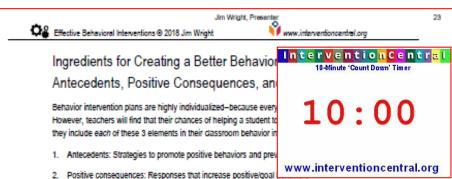
Scheduled Attention: Rechannel Adult Interactions (Austin & Soeda, 2008). A strategy to increase positive behaviors is to 'catch the student being good' with regular doses of 'scheduled attention': (1) The teacher decides on a fixed-interval schedule to provide attention (e.g., every 8 minutes); (2) At each interval, the teacher observes the student; (3) If the student is engaged in appropriate behaviors at that moment, the teacher provides a dose of positive attention (e.g., verbal praise; non-verbal praise such as thumbs-up; brief positive conversation; encouragement). If off-task or not behaving appropriately, the teacher briefly redirects the student to task and returns immediately to instruction until the next scheduled-attention interval.

Response to Intervention

Activity: Select Strategies for Your Classroom
Look over the behaviormanagement ideas in Handout 2:

- Group 1: Antecedents:
 Strategies: pp. 9-11
- Group 2: Antecedent
 Strategies/Positive
 Consequences: pp. 12-13
- Group 3: Extinction
 Procedures: pp. 14-16

Select 1-2 ideas to recommend to teachers in your school/district.



3. Extinction procedures: Responses that extinguish problem behaviors

Every one of these elements plays a crucial role in promoting the success of a behavior plan. Antecedent strategies prevent the student from engaging in problem behaviors in the first place. Positive consequences motivate the student to show desired behaviors, such as academic engagement. Extinction procedures remove the 'pay-off' to the student for engaging in problem behaviors. While any one of the elements might be inadequate to change the student's behavior, the combination of antecedents, positive consequences, and extinction procedures can result in a strong, flexible plan and successful intervention outcome.

Teachers can use this guide to build their own behavior plans using its research-based ideas for antecedents, positive consequences, and extinction procedures.

NOTE: These abbreviations appear in the handout: ADHD (Attention-Deficit Hyperactivity Disorder):ODD (Oppositional Defiant Disorder):GAD (Generalized Anxiety Disorder)

1. Antecedents: Strategies to Prevent Misbehavior

Teachers have the greatest array of options to influence a student to engage in positive behaviors when they focus on antecedents: actions they take before the student behavior occurs. Proactive antecedent actions to encourage desired behaviors are often quick-acting, can prevent misbehavior and attendant interruption of instruction, and usually require less teacher effort than providing corrective consequences after problem behaviors have occurred. Teacher strategies to elicit positive student behaviors include making instructional adjustments, providing student prompts and reminders, and teaching students to monitor and evaluate their work performance. Here are specific antecedent ideas that teachers can use to 'nudge' students to engage in desired behaviors:

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- ADHD:ODD:GAD: Instructional Match: Ensure the Student Can Do the Work (Burns, VanDerHeyden, & Boice, 2008). Student misbehavior frequently arises from an inability to do the academic task. When the student

Activity: What Are Your Next Steps?

Intervention Central 5-Minute 'Count Down' Timer

05:00

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Identify 2-3 'next steps' to use key ideas and resources from this data-collection training back in your classroom or school.

