How to be Diagnostic

And love it

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Why do we use data?

So instructors can explicitly
Develop Accurate Targeted Acquisition
in those who are in their care.

Targeted Instruction+Time=Learning

(Buffum, Mattos, & Weber, 2011, p. 8)

What is your favorite thing to do with data?
What are barriers to using data?

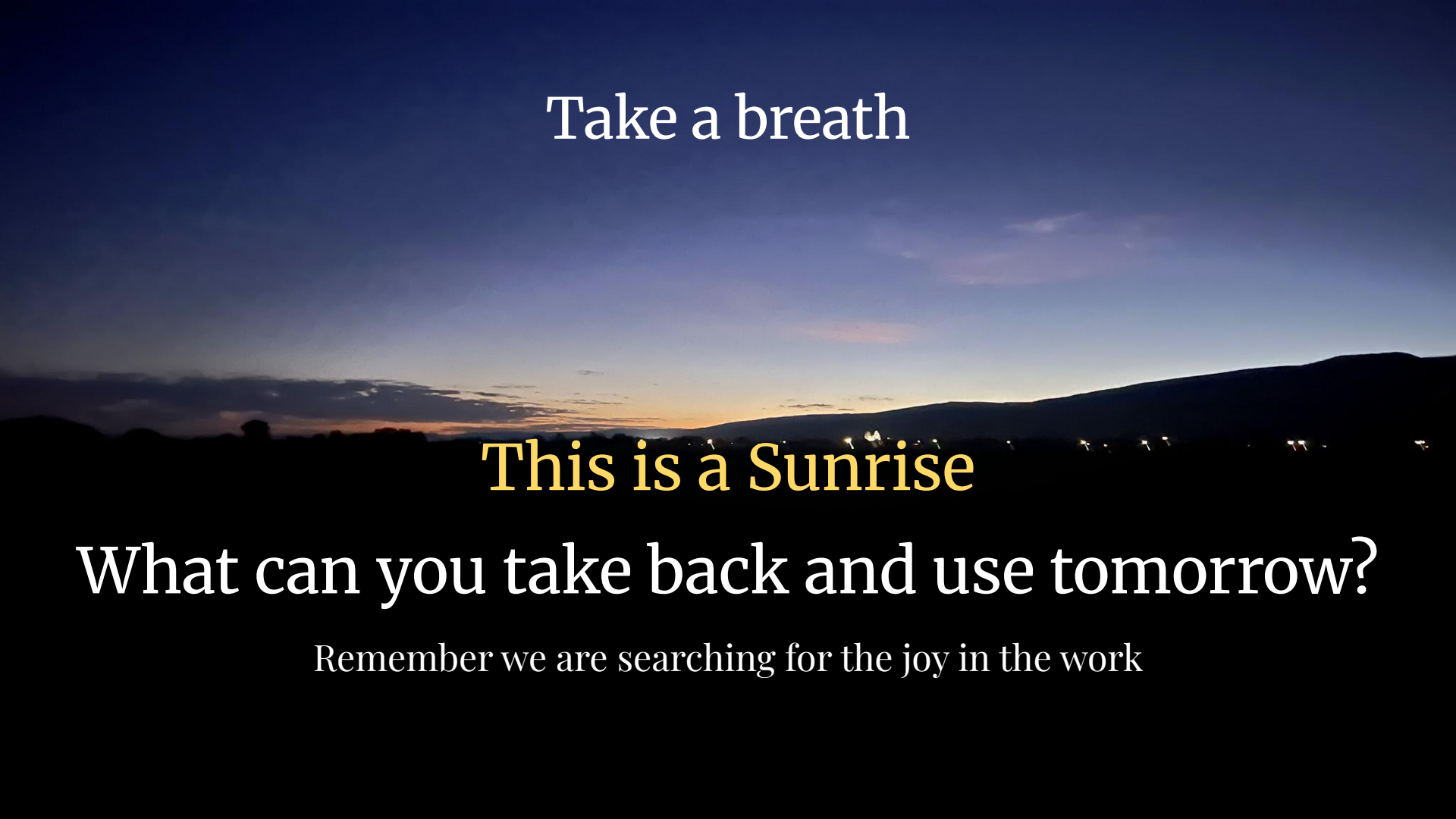
What do you think mine favorite thing to use data for?

Celebrate Growth!—

Class Objective:

- To learn from each other
- Be comfortable with taking data and finding joy in it or at least find it useful:)
- Knowledge I want you to know by the end of this class

- So how can we do that?
  - Be respectful/listen to others
  - Be engaged-What does engaged look like for you
  - Prepare to learn/be the best learner
- So how do we do that?
  - see a need
  - confident using it
  - time effective
- Knowledge I want you to be familiar with enough to start using it.
  - Understanding the difference between Acquisition, Proficiency, and Adaptation/Generalization.
  - Know the difference between progress monitoring and intervention and how to intensify intervention.
  - Be aware of Initiative Fatigue so you can avoid Initiative Fatigue in your school and in yourself.


Take a breath
This is a Sunrise
What can you take back and use tomorrow?
Remember we are searching for the joy in the work

Case Studies Background

Elementary Student:

Elefante Baby is an 8-year-old student in the 3rd grade. Elefante is a highly social child who thrives when working in groups and enjoys building friendships with peers. Elefante particularly enjoys art class and shows strong creative abilities.

Middle School Student:

Elefante Preteen is an 11-year-old 6th grader transitioning into middle school. Elefante is known for being outgoing and friendly, with a strong interest in creative subjects such as art and design. Elefante has a solid social network and enjoys interacting with peers.

High School Student

Elefante Adultish is a 15-year-old 10th-grade student known for being highly social and energetic. Elefante has a strong group of friends and is actively involved in school clubs that involve creativity and peer collaboration. Elefante demonstrates particular talent in the visual arts and often uses this as a coping mechanism.

10 Key steps to being Diagnostic

- Stage 1: Problem Definition
  - Step 1: Initial Referral–seeing there is a need
  - Step 2: Clarifying the Problem- focus in on one or two potential areas for intervention
  - Step 3: Obtain Baseline Information
- Stage 2: Problem Analysis
  - Step 4: Conducting an Analysis of the Problem- review information already collected.
  - Step 5: Exploring Alternative Intervention Strategies
  - Step 6: Selecting Interventions
  - Step 7: Developing the Intervention Plan
- Stage 3: Plan Implementation
  - Step 8: Plan Implementation
- Stage 4: Plan Evaluation
  - Step 9: Evaluating Intervention Plan Effectiveness
  - Step 10: Continue Problem Solving, Plan Revision, and Possible Referral

When starting it is best to write out the steps (Fidelity Checklist)

Elementary Student:

Elefante teacher report that E is well-liked by peers and has excellent interpersonal skills when working collaboratively. When Elefante becomes frustrated, providing short breaks or calming time significantly helps in regaining focus and emotional regulation. With consistent support and structured transitions, E is able to re-engage in tasks. Academic performance is below grade level in reading and math, but E excels in creative tasks.

Elefante is a constant source of disruption during class time. E frequently talks and distracts others, and often has difficulty completing assignments without redirection. Following adult directions is inconsistent, particularly when transitioning from one activity to another.

Elefante tends to be impulsive, blurting out answers, leaving their seat without permission, and often displaying impatience during transitions or routine changes. After engaging in a preferred activity, such as art or recess, Elefante struggles to return to academic tasks.

Middle School Student:

The teachers have found that Elefante show resilience and the ability to self-regulate when given access to breaks, quiet time, or positive reinforcement. Socially, E is a natural leader and thrives in group work when expectations are clearly defined. Academically, E struggles in math and reading but performs well in art and other visual-spatial tasks.

E ’s behavior in class often includes frequent disruptions—talking out of turn, distracting classmates, and failing to follow classroom procedures. Transitions between classes and subjects present a particular challenge, where impulsivity and frustration are most evident. Elefante often requires multiple reminders to complete tasks and exhibits avoidance when transitioning from preferred to non-preferred tasks, particularly in core academic work.

High School Student

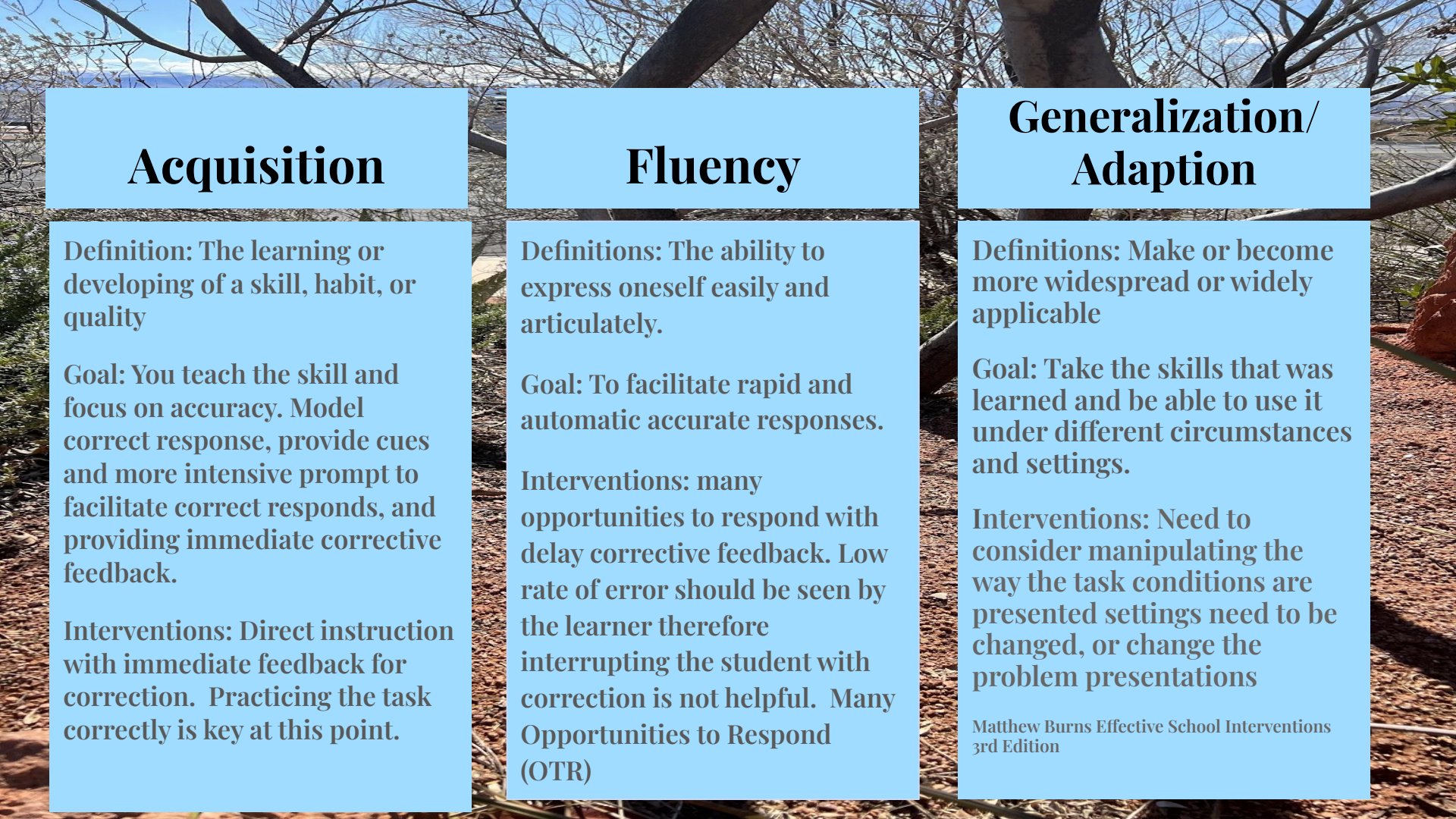
Elefante art teacher reports E is highly artistic and thrives in structured, project-based environments that offer creativity and autonomy. Emotional regulation improves when E is allowed breaks, listens to music, or uses a sketch journal. Elefante has the insight to recognize stress and seeks support when a trusted adult is available.

In academic classes, Elefante frequently distracts others, shows impulsivity, and avoids non-preferred tasks. Directions from teachers are often ignored unless repeated, and E can appear defiant or disinterested when asked to return to work after a favored activity. Transitions between periods or group settings tend to trigger frustration or agitation.

E's parent reports that Elefante becomes easily overwhelmed with academic demands but responds well to breaks, downtime, or creative outlets. While social and generally positive with peers, E’s impulsivity and lack of task persistence affect academic performance.

What is the most pressing issue for you to address?

What is your goal and where can you make the most impact?



Acquisition

Definition: The learning or developing of a skill, habit, or quality

Goal: You teach the skill and focus on accuracy. Model correct response, provide cues and more intensive prompt to facilitate correct responds, and providing immediate corrective feedback.

Interventions: Direct instruction with immediate feedback for correction. Practicing the task correctly is key at this point.

Fluency

Definitions: The ability to express oneself easily and articulately.

Goal: To facilitate rapid and automatic accurate responses.

Interventions: many opportunities to respond with delay corrective feedback. Low rate of error should be seen by the learner therefore interrupting the student with correction is not helpful. Many Opportunities to Respond (OTR)

Generalization/ Adaption

Definitions: Make or become more widespread or widely applicable

Goal: Take the skills that was learned and be able to use it under different circumstances and settings.

Interventions: Need to consider manipulating the way the task conditions are presented settings need to be changed, or change the problem presentations

Matthew Burns Effective School Interventions 3rd Edition

	Acquisition	Proficiency	Generalization	Adaption
Learning Hierarchy	■Slow and inaccurate	■Accurate but slow	■Can apply to novel setting	■Can use information to solve problems
Instructional Hierarchy	■Modeling ■Explicit instruction ■Immediate corrective feedback	■Novel practice opportunities ■Independent practice ■Timings ■Immediate feedback	■Discrimination training ■Differentiation training	■Problem solving ■Simulations

Haring, N. G., & Eaton, M. D. (1978). Systematic instructional procedures: An instructional hierarchy. In N. G. Haring, T. C. Lovitt, M. D. Eaton, & C. L. Hansen (Eds.) *The fourth R: Research in the classroom* (pp. 23-40). Columbus, OH: Charles E. Merrill.

Listed were the student is successful and not successful in the classroom. Where does this students problem possible acure in acquisition, fluency, or generalization? What steps do we need to take to define the problem.

- Stage 1: Problem Definition
  - Step 1: initial Referral–seeing there is a need
  - Step 2: Clarifying the Problem- focus in on one or two potential areas for intervention
  - Step 3: Obtain Baseline Information

Area this student E can use intervention step 1 and 2

E's-distraction and inattention

Not completing assignments

Following directions

E's impulsivity focus on transitions

Hard time transitioning from preferred activities to work

E gets frustrated easily

Struggles with academic areas

Defining the Problem-We need more information where?

We need to know what areas academically this student struggles?

Basic Reading Reading Fluency Reading Comprehension Math Calculation Applied Mathematics	Writing/Spelling Listening Comprehension Observation on behavior/where/when/frequency

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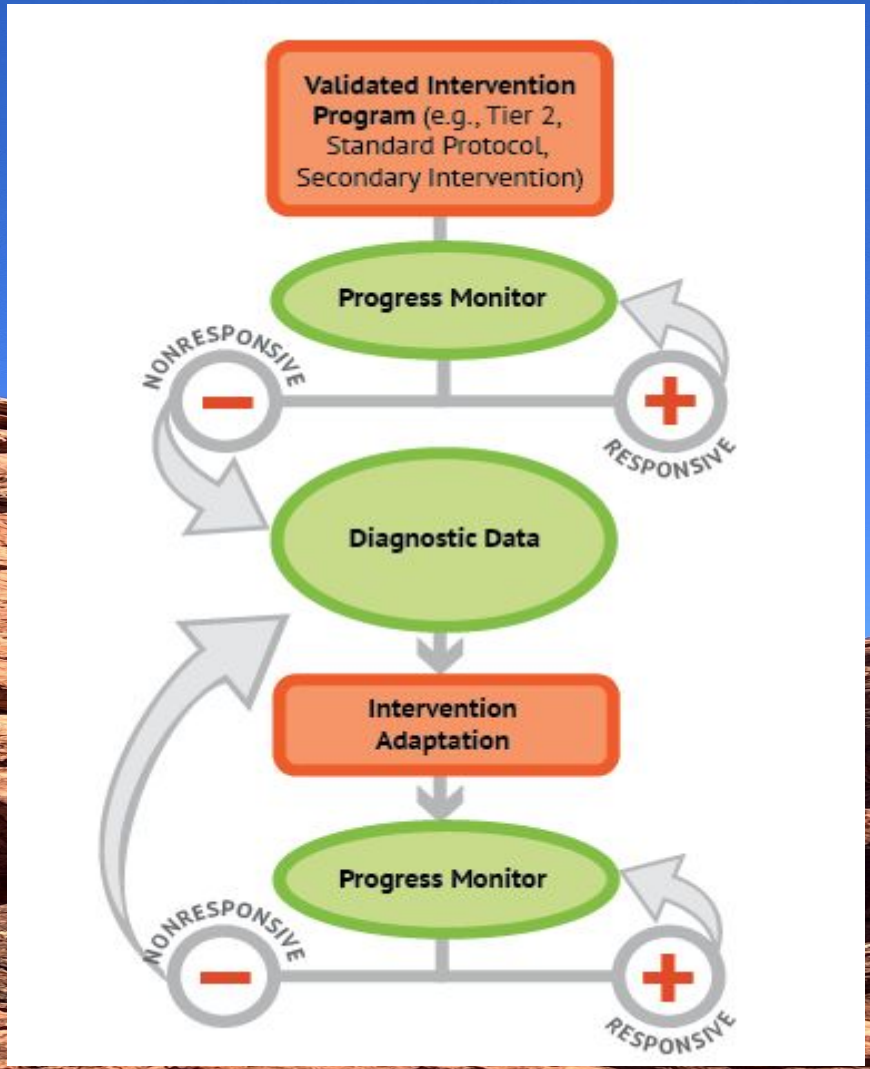
Increasing Intervention Intensity with the Learning Hierarchy

	Strategies to Use for Specific Academic Domain When Students are Not Making Growth					
Learning Hierarchy Phase	Phonemic Awareness (PA)	Decoding	Reading Fluency	Reading Comprehension	Math Computation	Math Problem Solving
Example Tier 2 Intervention	LiPS Road to the Code	Sound Partners REWARDS	Read Naturally Six Minute Solution	Reciprocal Teaching	Math Facts in a Flash Reflex Math	Schema-Based Math Instruction
Acquisition **Exit Goal: Student can perform the skill accurately with minimal support** **Question – After completing an intervention session, can the student accurately complete the skill?**	**Validated Program** • Target easier PA skill **Adaption** • Reduce number of targets based on acquisition rate (AR) • Use more meaningful visual cues	**Validated Program** • Check PA skills – target PA **Adaption** • Reduce number of targets based on AR • Use visual cues	**Validated Program** • Check Decoding skills – target Decoding • Duet Reading • Listening Passage Preview **Adaption** • Add phase drills • Use easier passages	**Validated Program** • Check fluency – target reading fluency **Adaption** • Pre-teach key words (with IR) • Add paragraph shrinking to connected text reading	**Validated Program** • Check conceptual understanding – target conceptual understanding • Cover-copy-compare **Adaption** • Reduce number of targets based on AR • Use visual cues with the numbers	**Validated Program** • Check computation skills –target computation • Cognitive routine for word problems **Adaption** • Provide more instruction in visually representing the problem
Proficiency/fluency **Exit Goal: Student a) has learned skill well enough to retain b) has learned skill well enough to combine with other skills** **Question – If the student can immediately complete the skill after it is taught, does she or he remember the next day?**	**Validated Program** • Picture sorts • Ship is loaded with **Adaption** • Increase repetitions for each skill taught • Increase review of previous targets taught	**Validated Program** • Build a word • IR to teach sounds and sound combos • Pocket Words with target sounds in them • Word sorts with target sounds in them **Adaption** • Start with review • Review the taught sounds two times throughout the day	**Validated Program** • IR with high-frequency words • Pocket words with high-frequency words • Preteach frequently occurring words **Adaption** • Increase number of practice reads in repeated reading • Partner reading by sentence	**Validated Program** • Preteach key words **Adaption** • Increase practice with the comprehension skills • Conduct short reviews of skills taught that day throughout the day	**Validated Program** • IR with math facts • Response cards • Pocket facts • Timed math drills • Taped problems **Adaption** • Start interventions with review • Review the taught facts two times throughout the day	**Validated Program** • Practice with steps in cognitive routine for word problems **Adaption** • Provide more practice visually representing the problem

Learning Hierarchy Phase	Phonemic Awareness (PA)	Decoding	Reading Fluency	Reading Comprehension	Math Computation	Math Problem Solving
Generalization **Exit Goals: Student a) uses skill across settings b) does not confuse targets with similar skills** **Question – If the student can accurately demonstrate the skill immediately after it is taught and remembers it the next day, can she or he apply it?**	• Practice interventions with and without picture cards	• Practice reading books that contain target word families (Reading A-Z) • Teach all sounds within words and end intervention sessions by reading sentences that contain the words	• Practice reading across mediums and type of texts	• Practice applying the strategies in different mediums and types of texts	• Teach flexibility in solving equations • Teach relationship between operations (division for multiplication and subtraction for addition) • Fill in missing numbers in equations	• Cue cards for cognitive routine

Created with help from Anne Birchem

CLick Here to find the interactive website at NCII



Your Friend: Gap Analysis /Answers the questions how much is to much?

Why we use Gap Analysis:

- Helps determine if or how a student student is responding to instruction
- Helps determine how intense instruction should be

Gap Analysis Worksheet

Student Name _____

Grade: _____ Date: _____

Why we use Gap Analysis:

- Helps determine if or how a student student is responding to instruction
- Helps determine how intense instruction should be

How to Calculate the GAP (Remember that the Gap is ALWAYS calculated at CURRENT Grade level)

Step 1

- The Gap is determined by dividing the CURRENT benchmark by CURRENT performance
- Then we determine if the Gap is significant (guideline: anything above 2.0 is significant)

Step 2 What kind of progress is needed to close the gap?

- This step is determined by subtracting the CURRENT performance from the END OF YEAR benchmark
- Divide this number by the amount of weeks left in the year
- Is this a reasonable goal for this student?

OR

- Determine reasonable amount to be made up per week for this student
- Figure out how many weeks it will take for the student to accomplish this goal

Step 1: Determine Gap

Assessment used: _____

Current Gap: _____

_____	/	_____	=	_____	
Current Benchmark		Current Performance		Current Gap	Is it Significant? ___Yes ___No (2.0 or greater)

Step 2: Gap Analysis

_____	-	_____	=	_____	_____	/	_____	= _____*
End of Year Benchmark		Current Performance		Needed to catch up	Needed to catch up		weeks left in the year	how many/how much per week

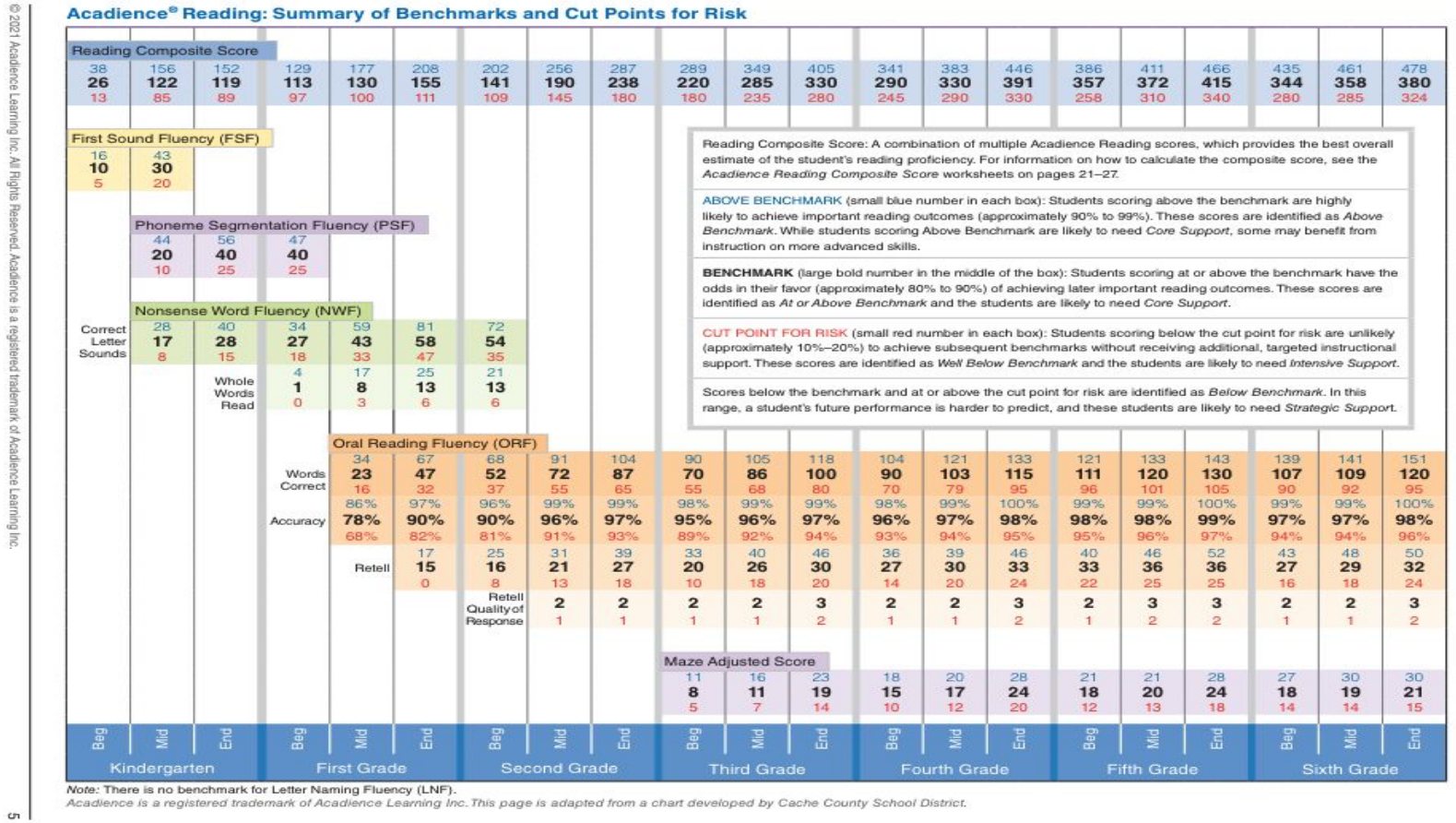
OR

_____	/	_____	=	_____*
Needed to catch up		how many/how much per week		number of weeks to meet goal

***Team to determine: Is closing the gap realistic for the student? Comments? Plan?**

E's Academic Scores

Acadiance can be used for any student struggling. It is in level because the skills build.



Acadience® Reading: Summary of Benchmarks and Cut Points for Risk

	Beg			Mid			End			Beg			Mid			End			Beg			Mid			End		
	Kindergarten			First Grade			Second Grade			Third Grade			Fourth Grade			Fifth Grade			Sixth Grade								
Reading Composite Score	38	156	152	129	177	208	202	256	287	289	349	405	341	383	446	386	411	466	435	461	478						
	26	**122**	**119**	**113**	**130**	**155**	**141**	**190**	**238**	**220**	**285**	**330**	**290**	**330**	**391**	**357**	**372**	**415**	**344**	**358**	**380**						
	13	85	89	97	100	111	109	145	180	180	235	280	245	290	330	258	310	340	280	285	324						
First Sound Fluency (FSF)	16	43																									
	10	**30**																									
	5	20																									
Phoneme Segmentation Fluency (PSF)	44	56	47																								
	20	**40**	**40**																								
	10	25	25																								
Nonsense Word Fluency (NWF)																											
Correct Letter Sounds	28	40	34	59	81	72																					
	17	**28**	**27**	**43**	**58**	**54**																					
	8	15	18	33	47	35																					
Whole Words Read			4	17	25	21																					
			1	**8**	**13**	**13**																					
			0	3	6	6																					
Oral Reading Fluency (ORF)																											
Words Correct			34	67	68	91	104	90	105	118	104	121	133	121	133	143	139	141	151								
			23	**47**	**52**	**72**	**87**	**70**	**86**	**100**	**90**	**103**	**115**	**111**	**120**	**130**	**107**	**109**	**120**								
			16	32	37	55	65	55	68	80	70	79	95	96	101	105	90	92	95								
Accuracy			86%	97%	96%	99%	99%	98%	99%	99%	98%	99%	100%	99%	99%	100%	99%	99%	100%								
			78%	**90%**	**90%**	**96%**	**97%**	**95%**	**96%**	**97%**	**96%**	**97%**	**98%**	**98%**	**98%**	**99%**	**97%**	**97%**	**98%**								
			68%	82%	81%	91%	93%	89%	92%	94%	93%	94%	95%	95%	96%	97%	94%	94%	96%								
Retell				17	25	31	39	33	40	46	36	39	46	40	46	52	43	48	50								
				15	**16**	**21**	**27**	**20**	**26**	**30**	**27**	**30**	**33**	**33**	**36**	**36**	**27**	**29**	**32**								
				0	8	13	18	10	18	20	14	20	24	22	25	25	16	18	24								
Retell Quality of Response					2	2	2	2	3	2	2	2	3	2	3	3	2	2	3								
					1	1	1	1	1	2	1	1	2	1	2	2	1	1	2								
Maze Adjusted Score								11	16	23	18	20	28	21	21	28	27	30	30								
								8	**11**	**19**	**15**	**17**	**24**	**18**	**20**	**24**	**18**	**19**	**21**								
								5	7	14	10	12	20	12	13	18	14	14	15								

Reading Composite Score: A combination of multiple Acadience Reading scores, which provides the best overall estimate of the student's reading proficiency. For information on how to calculate the composite score, see the *Acadience Reading Composite Score* worksheets on pages 21–27.

ABOVE BENCHMARK (small blue number in each box): Students scoring above the benchmark are highly likely to achieve important reading outcomes (approximately 90% to 99%). These scores are identified as *Above Benchmark*. While students scoring Above Benchmark are likely to need *Core Support*, some may benefit from instruction on more advanced skills.

BENCHMARK (large bold number in the middle of the box): Students scoring at or above the benchmark have the odds in their favor (approximately 80% to 90%) of achieving later important reading outcomes. These scores are identified as *At or Above Benchmark* and the students are likely to need *Core Support*.

CUT POINT FOR RISK (small red number in each box): Students scoring below the cut point for risk are unlikely (approximately 10%–20%) to achieve subsequent benchmarks without receiving additional, targeted instructional support. These scores are identified as *Well Below Benchmark* and the students are likely to need *Intensive Support*.

Scores below the benchmark and at or above the cut point for risk are identified as *Below Benchmark*. In this range, a student's future performance is harder to predict, and these students are likely to need *Strategic Support*.

Note: There is no benchmark for Letter Naming Fluency (LNF).

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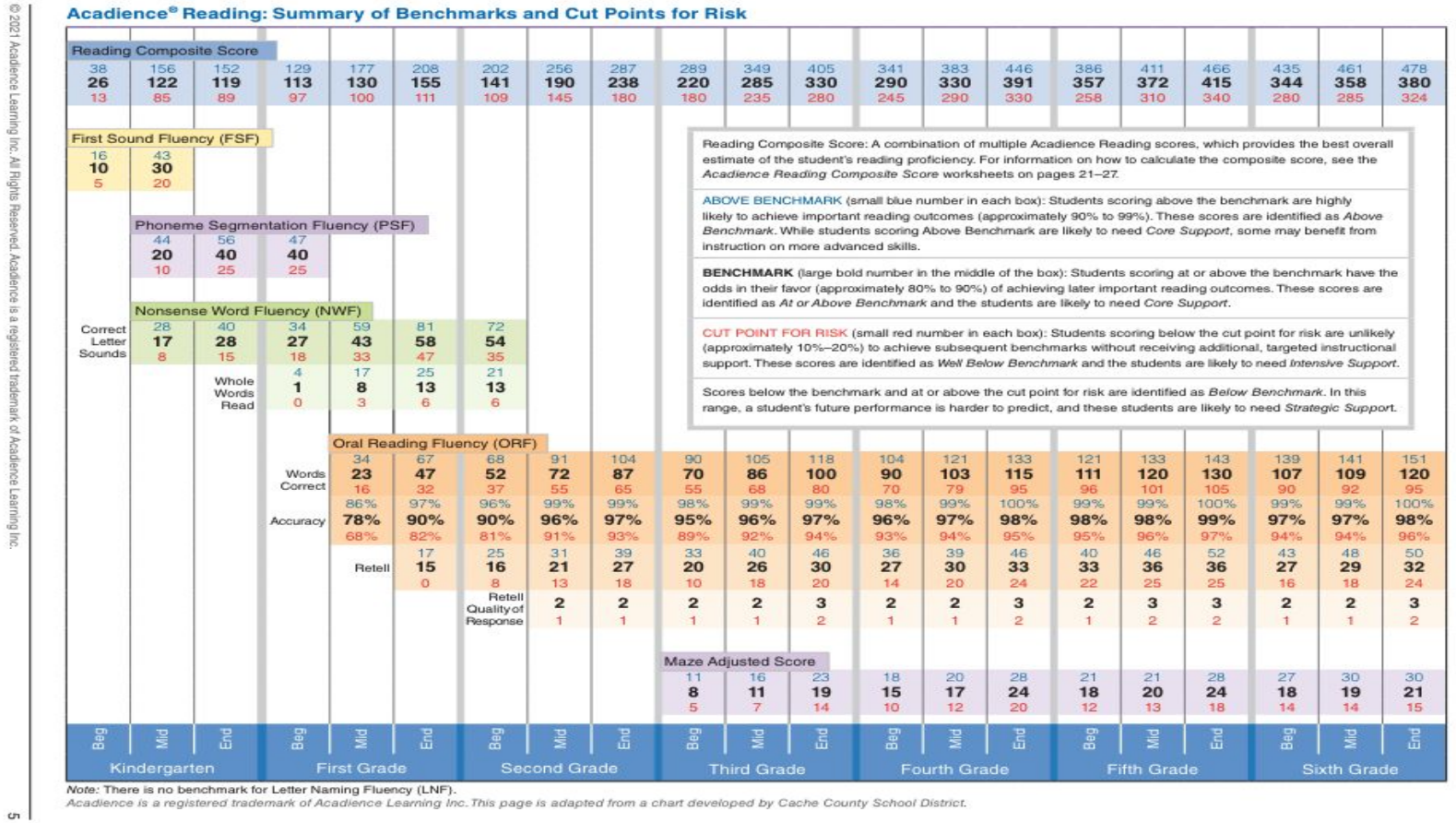

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Curriculum-Based Measurement: Written-Expression Fluency Norms

CBM-Written Expression measures assess the mechanics and conventions of writing and can yield numeric indicators such as total words written, correctly spelled words, and correct writing sequences (Gansle et al., 2006). CBM-Written Expression probes are group-administered writing samples with an administration time of about 4 minutes.

Total Words Written (TWW): This measure is a count of the total words written during the CBM-WE assessment.

Grade	Fall TWW (Malecki & Jewell, 2003)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Spring TWW (Malecki & Jewell, 2003)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth (Tadatada, 2011)
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	--

Correctly Spelled Words (CSW): This measure is a count of correctly spelled words written during the CBM-WE assessment.

Grade	Fall CSW (Malecki & Jewell, 2003)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Spring CSW (Malecki & Jewell, 2003)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth (Tadatada, 2011)
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	--

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.

Grade	Fall CWS (Malecki & Jewell, 2003)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Spring CWS (Malecki & Jewell, 2003)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth (Tadatada, 2011)
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	--

Curriculum-Based Measurement: Maze Passage Fluency Norms

(Fuchs, Fuchs, Hamlett, Waltz, & Germann, 1993; Graney, Missall, Martinez, & Bergstrom, 2009; Jenkins & Jewell, 1993)*

CBM-Maze assesses basic student reading comprehension. In a Maze assessment, the student is given a passage in which every seventh word has been selected as a choice item. The student reads the passage silently. Each time the student comes to a choice item, the student chooses from among 3 replacement words: the correct word and two distractors. The student circles the replacement word that he or she believes best restores the meaning of the text. The Maze is timed: while the length of Maze assessments can vary, the most common time-standard is 3 minutes (Graney et al., 2009).

Grade	Fall Maze (Jenkins & Jewell, 1993)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Spring Maze (Jenkins & Jewell, 1993)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth (Fuchs et al., 1993)
2	6	1↔11	15	7↔23	0.40

Grade	Fall Maze (Graney et al., 2009)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Winter Maze (Graney et al., 2009)	Winter: +/-1 SD (≈16th%ile to 84th%ile)	Spring Maze (Graney et al., 2009)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth (Fuchs et al., 1993)
3	13	7↔19	14	8↔20	15	9↔21	0.40
4	14	9↔19	21	12↔30	20	12↔28	0.40
5	18	11↔25	22	14↔30	26	18↔34	0.40

Grade	Fall Maze (Jenkins & Jewell, 1993)	Fall:+/-1 SD (≈16th%ile to 84th%ile)	Spring Maze (Jenkins & Jewell, 1993)	Spring: +/-1 SD (≈16th%ile to 84th%ile)	Weekly Growth (Fuchs et al., 1993)
6	33	22↔44	39	26↔52	0.40

- Effect Size (Cohen D) = Average Post Intervention-Pre Intervention Average of the Average Standard Deviation post and pre interventions
  - You need baseline or pre-intervention data Calculate the Average and the Standard Deviation
  - The you need intervention date Calculate the Average and the Standard Deviation (This is easily done on a spreadsheet)

Link for video

Data based Decision Making

Intervention

This is the extra instruction that is given when a student is not responding to general education.

Data-based decision making is the process of using data (e.g., progress monitoring data) to make instructional decisions

Progress Monitoring

This is how you tell if the student is responding by getting the baseline for the student and then seeing there rate of growth. This is where you see if you need to continue the intervention as is, intensify the intervention or discontinue the intervention.

Interventions

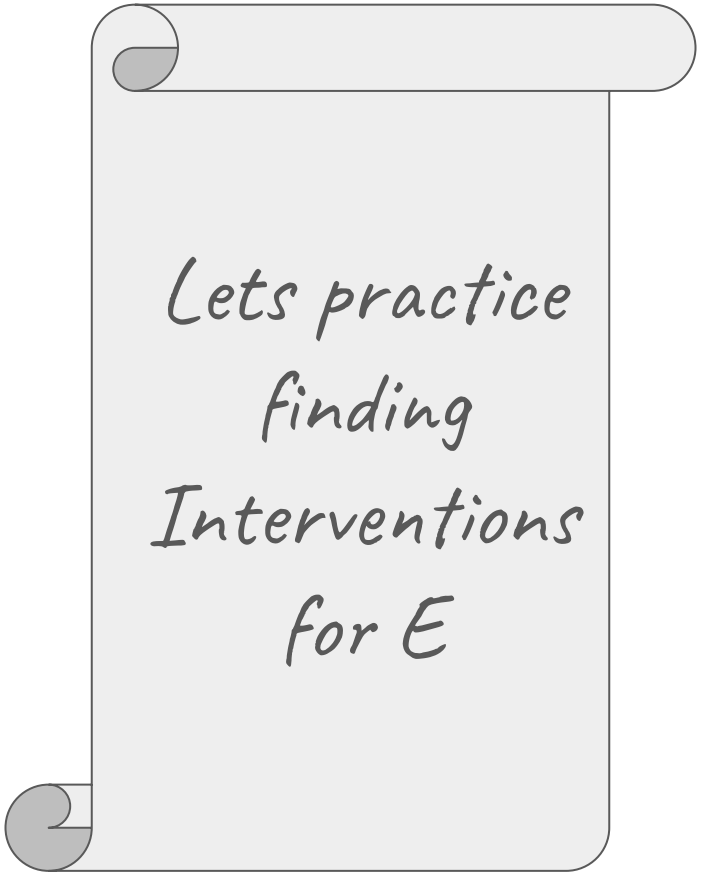
What do you know?

What is something you can take home with you today?

Matthew Burn Criterion for Selecting Intervention

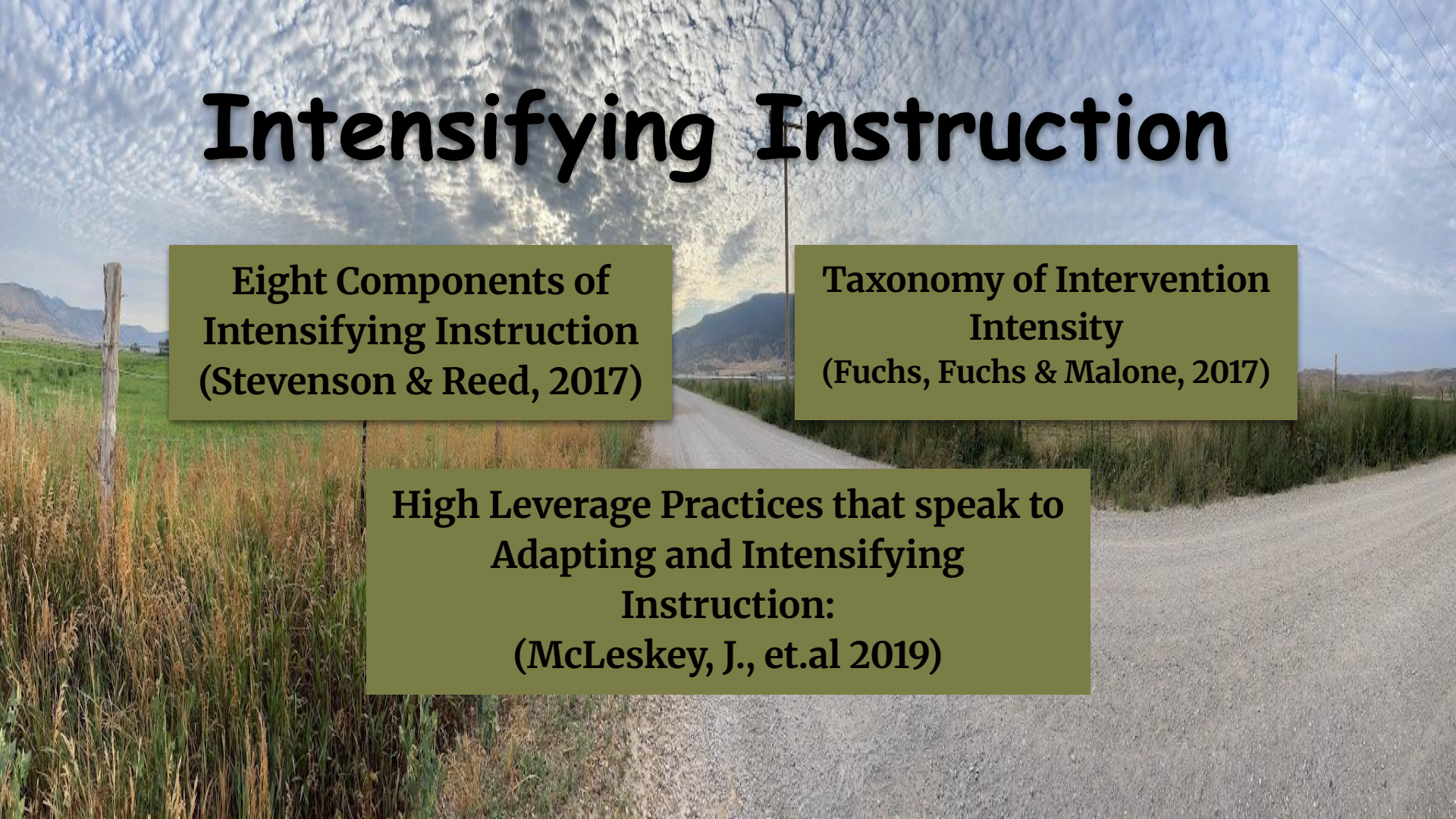
This works well for MTSS

1. Documented Evidence of Effectiveness
   a. https://ies.ed.gov/ncee/wwc/
2. Consistent with an Ecological Perspective (Whole Student)
   a. Look at the student deficits/environment school and home/students needs/instructional practices and classroom management.
3. Alignment with the Function of the Problem (Causal Variables)
4. Emphasis on a Proactive Approach to the Problem
   a. Anticipate possible problems (antecedents); more effective then manipulating the consequences
5. Capable of Classwide Application
6. Capable of Being Taught through a Consultation Format
7. Capable of Implementation Using Regular Classroom Resources
8. Capable of Being Evaluated by Reliable, Valid, and Practical Methods



- Interventions
  - National Center for Intensive Intervention (NCII)
  - National Center on Intensive Intervention
    - Intervention intensity
  - National Center for Learning Disabilities
  - Evidence Based Intervention Network
  - Scientifically Based Research: A Link from Research to Practice reading Rockets **
  - Scientifically Based Research: NIL
  - Intervention Central: Response to Intervention
  - National Implementation Research Network (NIRN)

Intensifying Instruction



Eight Components of Intensifying Instruction (Stevenson & Reed, 2017)

Taxonomy of Intervention Intensity (Fuchs, Fuchs & Malone, 2017)

High Leverage Practices that speak to Adapting and Intensifying Instruction: (McLeskey, J., et.al 2019)

Eight Components of Intensifying Instruction

- Adjusting the amount of time (e.g., frequency, latency, and duration)
- Reducing the size of instructional groups
- Optimizing the fit between students' needs and the purpose of the intervention
- Increasing students' opportunities to respond (OTRs)
- Increasing student motivation to learn
- Increasing feedback (frequency and specificity)
- Changing methods (program, intervention, modality)
- Considering students' cultural norms and values

Worksheet for 8 Components for Intensiting Instruction.

Quantitative Factors	Current Instruction	Intensive Instruction
Dosage		
• Frequency		
• Duration		
• Latency (time b/w sessions)		
Reduce Group size		
Rate of opportunities to Respond		
Quantitative Factors	Current Instruction	Intensive Instruction
Optimize fit		
• Instructional focus		
• Students' primary needs		
Motivational Strategies in use		
Feedback		
• Frequency		
• Specificity		
Pedagogical Method		
• Program/ Intervention		
• Modality		
Cultural Relevance		

National Center on
INTENSIVE INTERVENTION
at American Institutes for Research

Taxonomy of Intervention Intensity: Academics

The *Taxonomy of Intervention Intensity** was developed based on existing research to support educators in evaluating and building intervention intensity.

Dimensions*	Description
Strength	How well the program works for students with intensive intervention needs, expressed in terms of effect sizes. Effect sizes of above .25 indicate an intervention has value in improving outcomes. Effect sizes of 0.35 to 0.40 are moderate; effect sizes of 0.50 or larger are strong (preferred).
Dosage	The number of opportunities a student has to respond and receive corrective feedback. It refers to the size of the instructional group, the number of minutes each session lasts, and the number of sessions provided per week.
Alignment	How well the program (a) addresses the target student's full set of academic skill deficits, (b) does *not* address skills the target student has already mastered (extraneous skills for that student), and (c) incorporates a meaningful focus on grade-appropriate curricular standards.
Attention to transfer	The extent to which an intervention is designed to help students (a) transfer the skills they learn to other formats and contexts and (b) realize connections between mastered and related skills.
Comprehensiveness	The number of explicit instruction principles the intervention incorporates (e.g., providing explanations in simple, direct language; modeling efficient solution strategies instead of expecting students to discover strategies on their own; providing practice so students use the strategies to generate many correct responses; and incorporating systematic cumulative review).
Behavioral support	The extent to which the program incorporates (a) self-regulation and executive function components and (b) behavioral principles to minimize nonproductive behavior.
Individualization	A validated, data-based process for individualizing intervention, in which the educator systematically adjusts the intervention over time, in response to ongoing progress monitoring data, to address the student's complex learning needs.

*Fuchs, L.S, Fuchs, D. & Malone, A.S. (2017). The Taxonomy of Intervention Intensity. *TEACHING Exceptional Children, 50(1)*, 35–43.

WANT TO LEARN MORE? Visit us at www.intensiveintervention.org.

National Center on
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Taxonomy of Intervention Intensity: Behavior

The *Taxonomy of Intervention Intensity** was developed based on existing research to support educators in evaluating and building intervention intensity.

Dimensions*	Description
Strength	How well the program works for students with intensive intervention needs, sometimes expressed as a promising or effective program by a reliable source (e.g., NCII Tools Charts, WWC).
Dosage	The number of opportunities a student has to (a) respond (i.e., practice/demonstrate skill), (b) receive positive feedback (e.g., praise, tokens, points), (c) exchange for backup reinforcers, and (d) receive corrective feedback.
Alignment	How well the program (a) addresses school-wide expectations, (b) addresses classroom/teacher expectations, (c) addresses student's skill deficits, (d) matches rewards to student's preferences and/or function of problem behavior, and (e) does not address extraneous skills.
Attention to transfer	The extent to which an intervention emphasizes how and when a student uses skills across contexts/situations and includes opportunities to practice using skills across context/situations. The program reinforces the use of skills across contexts/situations.
Comprehensiveness	The extent to which the intervention includes a plan for (a) teaching appropriate behavior, (b) adjusting antecedent conditions to prevent problem behavior, (c) reinforcing appropriate behavior, (d) minimizing reinforcement for problem behavior, (e) fading supports (and supports can be easily faded), (f) monitoring fidelity, (g) working in conjunction with related services, and (h) communicating with parents.
Academic support	The extent to which the program (a) can be easily integrated within context of academic instruction, (b) complements rather than supplants academic focus, and (c) includes procedures for reinforcing responses related to academic achievement (e.g., engagement, work completion).
Individualization	A validated, data-based process for individualizing intervention, in which the educator systematically adjusts the intervention over time, in response to ongoing progress monitoring, to address the student's complex learning needs.

*Adapted from Fuchs, L.S, Fuchs, D. & Malone, A.S. (2017). The Taxonomy of Intervention Intensity. *TEACHING Exceptional Children, 50(1)*, 35–43.

High Leverage Practices that speak to Adapting and Intensifying Instruction:

- (HLP 6) Use student assessment data, and make necessary adjustments that improve student outcomes
- (HLP 13) Adapt curriculum tasks and materials for specific learning goals
- (HLP 20) Provide intensive instruction

Progress Monitoring

What do you know about Progress Monitoring?

Is progress monitoring effective?
research Fuchs and Fuchs (2007)

Iris progress monitoring mathematics

Iris center progress monitoring reading

Module for Progress Monitoring NCII

Type	When?	Why?
Summative	After	Assessment **of** learning
Diagnostic	Before	Identify skill strengths and weaknesses
Formative	During	Assessment **for** learning

Monitoring Progress vs. Progress Monitoring

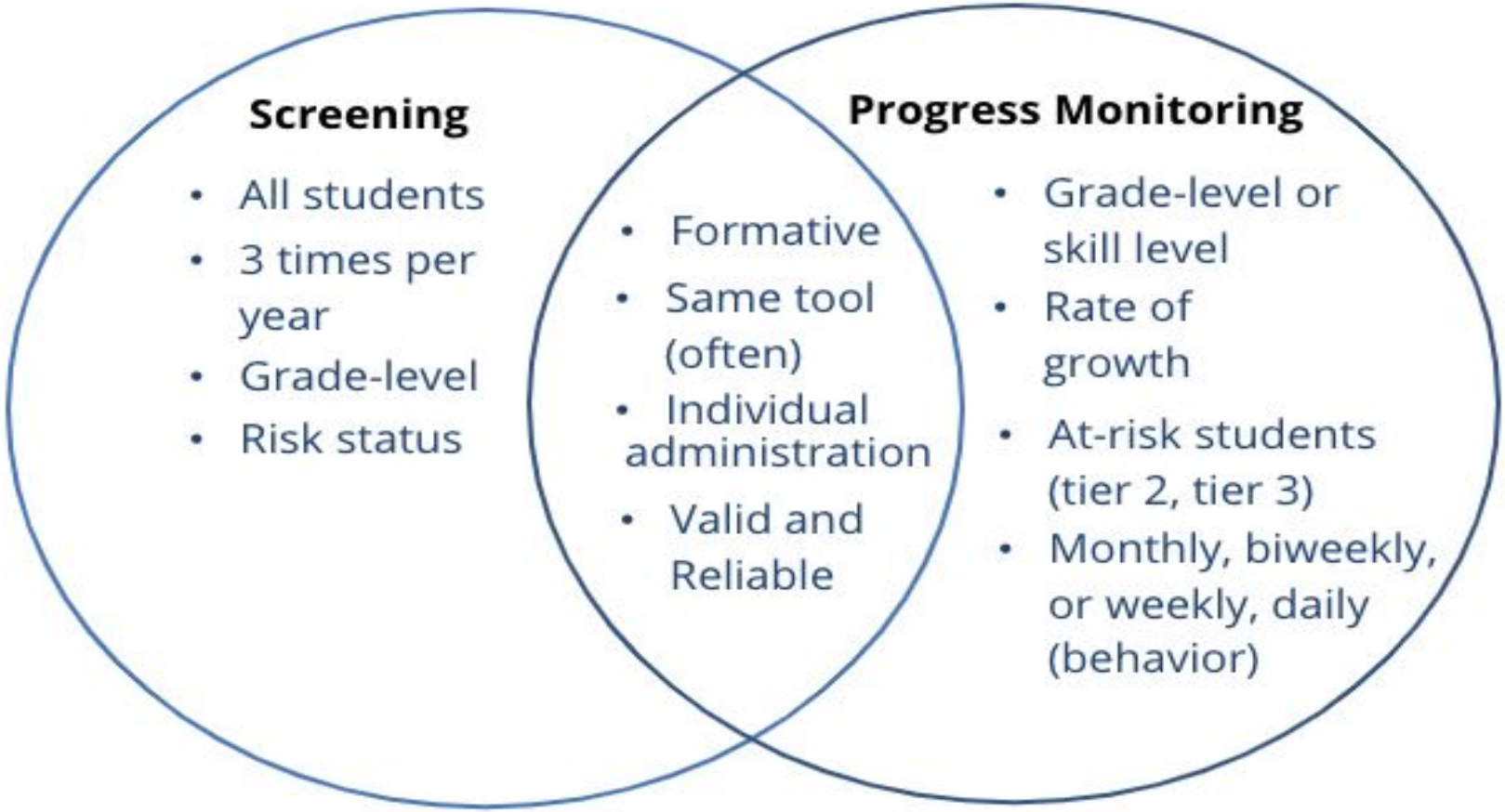
Monitoring progress is not the same as **progress monitoring**.

Monitoring Progress

- Can occur daily
- Occurs during instruction
- Provides data for immediate, real-time instructional decisions
- Aligns with HLPs (e.g., interpreting student thinking)
- Often informal or unstandardized
- Uses formative assessments, questioning, providing feedback, and similar strategies.
- Used for ALL students

Progress Monitoring

- Standardized delivery
- Requires valid and reliable measures
- Frequency depends on intensity of instruction and developer recommendations
- Requires ongoing data (i.e., 6-9 data points) for valid interpretation
- Used for entitlement decisions
- Requires graphed data
- Used for students receiving targeted and intensive intervention (~20-25% of population)


Screening
All students
3 times per year
Grade-level
Risk status
Formative
Same tool (often)
Individual administration
Valid and Reliable
Progress Monitoring
Grade-level or skill level
Rate of growth
At-risk students (tier 2, tier 3)
Monthly, biweekly, or weekly, daily (behavior)

Key Characteristics of Progress Monitoring Measures

Progress monitoring tools are:

- Available for both academics and behavior
- Brief and easy to administer using standard procedures
- Repeated over time to capture student learning
- Sensitive to change
- Valid, reliable, and evidence based
- Administered and scored using standardized procedures

Types of Progress Monitoring Measures

Mastery Measure/ Math sheet/ fluency or accuracy

General Outcome Measure/CBM writing

These both need to address the targeted skill of the intervention.

Graphing be way to see progress

How to analyze graph data https://iris.peabody.vanderbilt.edu/module/dbi2/cresource/q2/p04/

x- axis Horizontal–time of intervention

y-axis is the vertical -Score of the student data collected

Base line

Goal

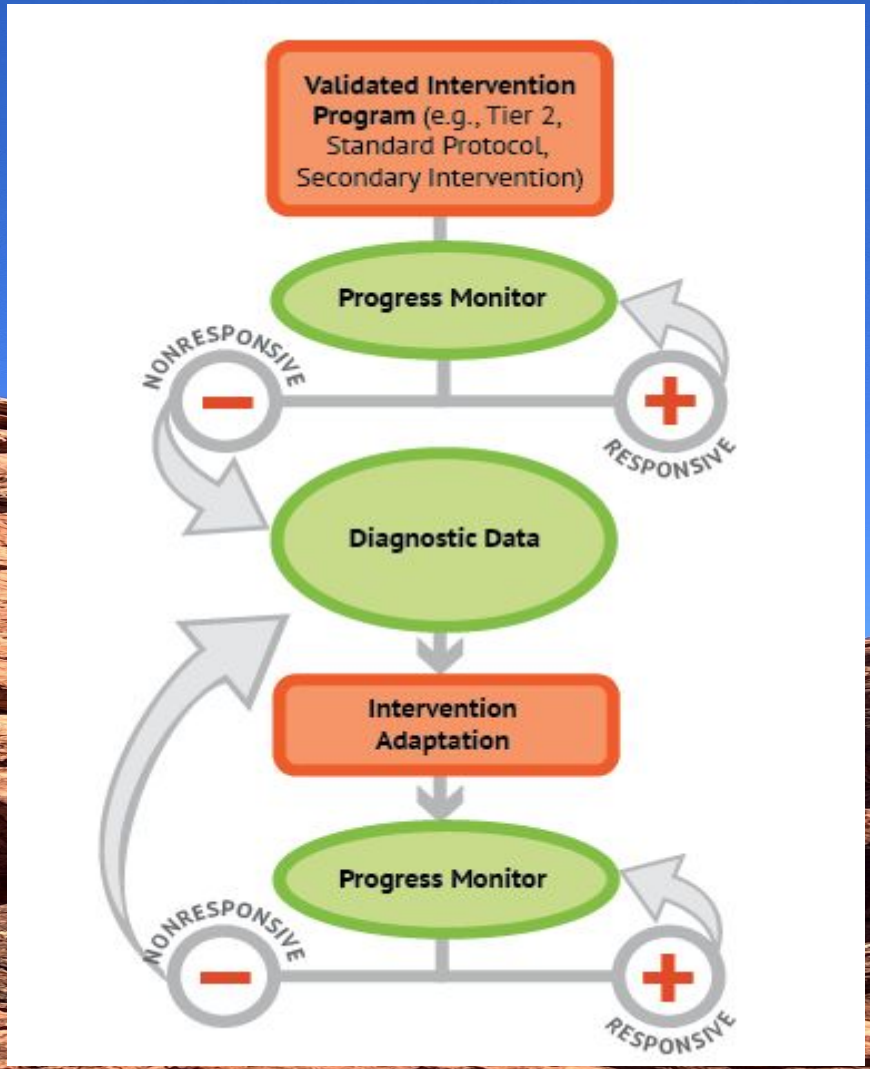
Goal line

Trend Line

Phase line -show when there were changes to the graph

Example line graph

Click Here to find the interactive website at NCII

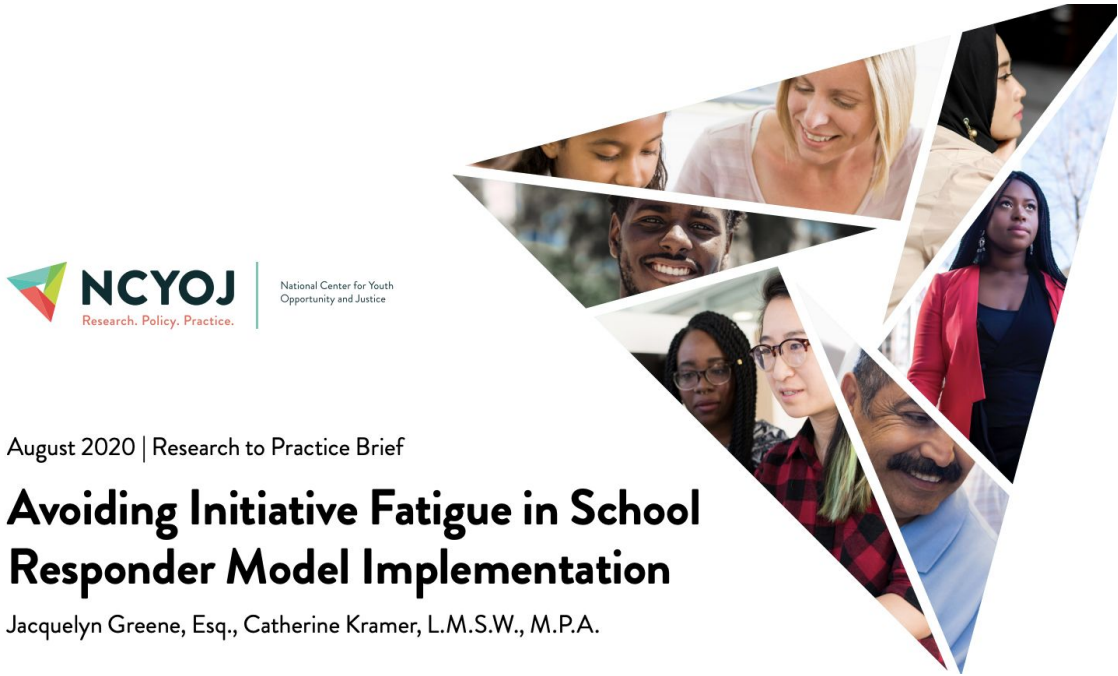


Initiative Fatigue

What do you know about Initiative Fatigue?

Initiative Fatigue

Jacquelyn Greene and Catherine Kramer. [Avoiding Initiative Fatigue in School Responder Model Implementation.](#) (Delmar, NY: National Center for Youth Opportunity and Justice, 2020).



Initiative Fatigue

In his book, Change Without Pain, Eric Abrahamson defined “repetitive-change syndrome” in businesses as the confluence of initiative overload, change-related chaos, and widespread employee anxiety, cynicism, and burnout.

According to Abrahamson, initiative overload occurs when an ***organization engages in more change processes than any person can reasonably handle. At some point, when many initiatives have been launched, people no longer know which change they are implementing or why.*** *This is change-related chaos.*

Consequently, employees become resistant to change as they are overwhelmed, hardened to the “come-and-go” nature of change initiatives, and weary as new initiatives are viewed with the anticipation of failure.

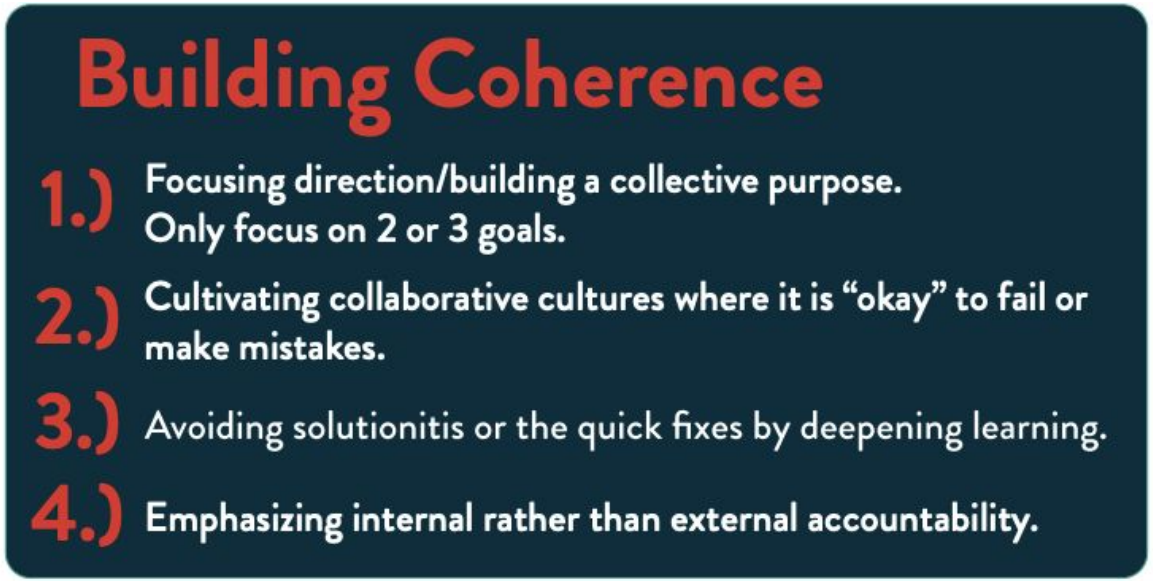
Initiative Fatigue continued

In 2010, Reeves described the "the law of initiative fatigue" in school settings as the state "...when the number of initiatives increases while time, resources, and emotional energy are constant, then each new initiative—no matter how well conceived or well intentioned—will receive fewer minutes, dollars, and ounces of emotional energy than its predecessors."

Fullan and Quinn argue that ***what is lost amidst the crush of repeated and sustained initiative implementation is coherence.*** *Initiatives are not only too numerous (overload), but also disconnected (fragmented).*

Building Coherence

The most successful school leaders are ones that help their schools focus with coherence or with a shared understanding about the nature of their work.

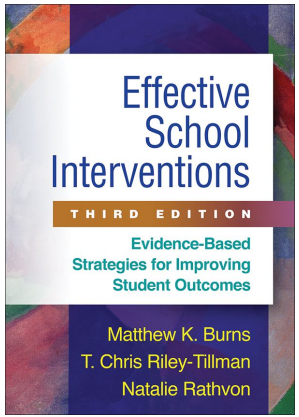


Resources

- Printable math flash cards/practice
  - https://www.coolmath4kids.com/more
  - https://www.funbrain.com/math-zone
    - This has a lot of commercials
  - https://www.varsitytutors.com/aplusmath/flashcards
  - Math Fact Cafe Worksheet up to 5th grade.
- Curriculum Based Measures
  - Six Minutes Solutions
  - Six Minutes Solutions/ Mr. Cooper
  - ABCs of CBM/Book/covers reading, writing, and math
  - Monitoring Basic Skills Progress (MBSP) Book
- Progress Monitoring
  - National Center on Intensive Intervention Academic Progress Monitoring
  -

Resources Continued

- Utah State Board of Education
  - Instructional Resources
  - Utah Schools Behavior Health Toolkit
  - Least Restrictive Behavior Interventions (LRBI)
- Books
  - Effective School Interventions 3rd Edition



Reference Page

Buffum, A., Mattos, M., & Weber, C. (2011). *Simplifying response to intervention: Four essential guiding principles.* Solution Tree Press.