



Response to Intervention

Progress Monitoring Guide

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Introduction

The Intervention program utilizes Curriculum Based Measurement (CBM) for fluency assessments for the progress monitoring tool of all students who are in tier II and tier III. CBM assessments are a standardized and systematic method of formative assessments. It is a validated method of progress monitoring with over 25 years of research on its effectiveness. CBM's have been linked to improved student academic outcomes, more effective instruction, and higher student achievement. The objective of progress monitoring is to determine the effectiveness of the intervention plan and to aid in the data-based decision-making of the Student Intervention Team.

When implementing progress monitoring, the frequency of data collection plays a critical role in determining the effectiveness of an intervention. According to recommendations from the Texas Education Agency, if progress monitoring data is collected daily, the effectiveness of the intervention may be determined within as little as two weeks. When data is collected twice per week, effectiveness can generally be assessed within one month. If data is collected weekly, it may take up to 12 weeks to determine whether the intervention is having the intended impact. These timelines should guide decision-making and help ensure that instructional adjustments are made in a timely manner.

District Expectation

Tier II and tier III interventionists will assess intervention students weekly for fluency in the area/s in which they are receiving intervention. Assessment resources are available to all interventionists. The interventionist or the intervention student will graph weekly results of the CBM on the provided graphs. The Student Intervention Team will meet every 12 weeks for a standard tier II plan, more often for tier III students or students whose progress monitoring indicates a need for adjustments to the intervention plan. Progress monitoring will be reported at the end of every grading period via copies of the progress monitoring results graph, and copies of intervention activity logs with online activities that include time on task and progress levels. Reports from online intervention platforms may be printed and submitted if they are available with the above information. The Intervention Department and campus administration will review the progress monitoring data and determine if there is a need for adjustments to students' plans. Teachers can request to review and discuss data at any time.

Types of CBM

Below are the types of CBM or tasks that will be used for progress monitoring.

Types of Math CBM				
GRADE	TYPE	DESCRIPTOR	ADMIN	SCORE
Grades K-1st Early numeracy for students who do not know basic facts or are unable to understand computation concepts & application *Interventionists will choose one task and continue with the same task throughout the entire intervention period.	Number identification	Orally identify numbers between 1 and 100	Individually 1 minute	Total numbers correctly identified
	Missing number	Identify missing number in 4 number sequence	Individually 1 minute	Total numbers correctly identified
	Quantity Array	Identify the number of dots in a box	Individually 1 minute	Total numbers correctly identified
	Quantity Discrimination	Identify larger number from set of two numbers	Individually 1 minute	Total numbers correctly identified
Grade 1-12 Select a task for CBM progress monitoring and use the same task (level and type of probe) for the entire intervention time.	Computation	Single or multi-skill probes	Individually or in groups 2 minutes	Number of problems correct.

Types of Reading CBM			
Grade	Reading Task	Description	Time
Kindergarten	Letter name fluency	Students identify the letter in random order, minimum of 48 letters per page @ font size 36. Letter Fluency Probe Generator	1 minute
Kindergarten	Phonemic segmentation fluency	Students identify the sounds heard in a word provided orally.	1 minute
1st	Word Identification fluency	Students read a list of common words- Fry's instant words; 1st 100.	1 minute
	Oral Reading Fluency	Students read a passage and words read correctly are counted	
2nd-3rd	Oral Reading Fluency	Students read a passage and words read correctly are counted	1 minute
4th and higher	MAZE GOM	Students read a passage with blanks in place of words removed from the passage and choose a word to fill in the blanks. Words replaced correctly are counted. Score is calculated using adjusted score formula: Words correct - (words incorrect div by 2)= AS	3 minutes

CBM Steps

Step 1

Determine the task to be used for assessment: ORF, MAZE, math computation problems. Links are provided for some tasks, other tasks are provided in the “Baseline and Progress Monitoring” folder.

Step 2

Identify the level of materials using MAP data and classroom data.

Step 3

Establish a baseline. Week one will be used to collect baseline data.

To determine the baseline, each student is given 3 assessments during week 1. These can be done in one session, but preferably they should be done with some time in between each assessment.

Step 4 Set ambitious goals and create an aim line on the graph.

Step 5 Administer assessments and score.

Step 6 Add the score to the graph.

The Student Intervention Team will use the scores on the graph to apply data decision-making rules using the Percent of Nonoverlapping Data standards. A flow chart is available [here](#) to guide decision-making.

Instructions for Administration

Reading

Oral Reading Fluency (ORF)

The interventionist will use ORF to calculate the words correct per minute (WCPM) the student is able to read. The assessment administrator will say to the student: (Point to first word) **“When I say ‘start’, begin reading aloud at the top of this page. Read across the page (demonstrating by pointing) until I say ‘stop’. Try to read each word. If you come to a word you don’t know, just skip it and go on to the next one. Be sure to do your best reading. Ready. Go.”** As you say go, start a timer for 1 minute. The student begins reading a passage. If the student does not respond within 3 seconds, tell the student the word and move on. Score as the student reads; miscues are marked with a slash. At the end of one minute, draw a bracket to indicate how far the student read the passage. Count the number of words read correctly in one minute.

A more thorough running record may be done in place of this by simply marking the place in the passage the student was at the end of 1 minute with a bracket then allow the student to read to the end of the passage and mark the accuracy percentage, ask comprehension questions and determine comprehension percentage. This is in addition to the WCPM, it is considered correlating data and can be used in the discussion at meetings, but is not used for progress monitoring. The only portion of this assessment that should be documented as progress monitoring is the number of words read correctly in 1 minute. Correlating data can be taken less often.

MAZE

The assessment administrator will use the instructions and scoring key included with the Dibels and Acadience assessments. A resource folder will be available to access these assessments. A generator is available through Intervention Central, in the event that the provided MAZE assessments do not meet the student’s needs. Assessment administrators will need to read and follow the instructions from Intervention Central’s website provided [here](#) to create a MAZE using the generator.

Math

Early Numeracy Tasks for K-1st Grade Students

The interventionist will choose a task from the “types of math CBM” chart. Early numeracy tasks are timed for 1 minute. An early math fluency generator can be found on the intervention central website linked [here](#).

Computation math probe for grades 2-12

Probes should be single or mixed facts and 20-30 problems. Each assessment will be timed for 2 minutes. They can be given whole group or individually. Each student should be given a different level of assessment as determined by the SIT decision and the student’s target skills. Resources for computation fluency checks can be found on the intervention central website [here](#) and Super Kids Math Worksheet Creator [here](#).

Please note, once the level of assessment is determined, it must remain the same throughout the entire intervention plan. This will ensure that the data points are comparable for the entirety of the intervention plan.

Interpreting Data

Graph

Assessments will be given weekly and graphed by either the interventionist or the student on the provided graph. Please note, a different graph may be used by students that is more age appropriate, but data must be transferred to the provided graph to be considered by the SIT. Graphs are available in the progress monitoring resources Google folder linked [here](#).

Baseline

Week one of the intervention plan will be used to collect baseline data. To determine a baseline, each student is given 3 assessments during week 1. These can be done in one session, but preferable they should be done with some time between each assessment. The interventionist will record the median baseline results at the indicated spot on the graph or the first section, if a spot is not indicated. Mark the baseline by drawing a horizontal line from the median score to the last week of the intervention period (that should be 12 weeks, unless otherwise indicated by the SIT.)

Fig. 1: example of all data points above baseline

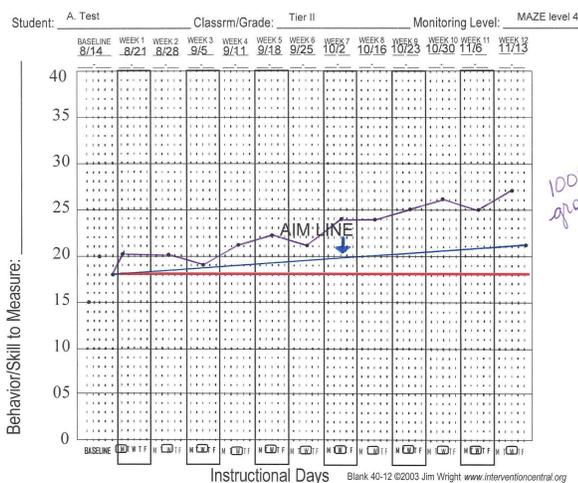
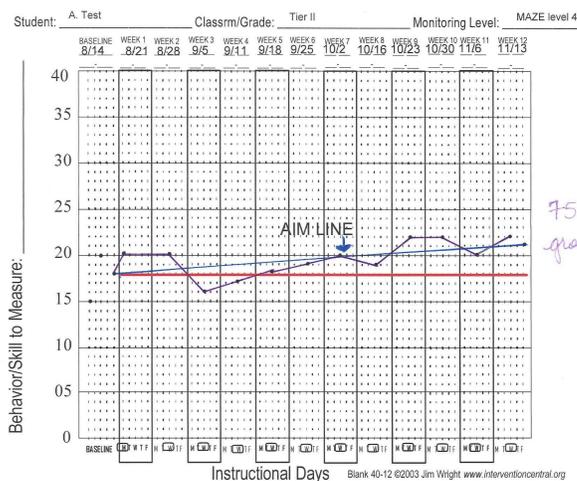


Fig 2: example of data points that fall below baseline



Aim Line

The aim line is determined by using norms. The formula to calculate the aim line is (weekly growth rate x 12 weeks)+(baseline median score)= goal; round up and draw a line from the median baseline score to the goal point.

Grade Level	Task	Weekly growth rate needed
Reading fluency		
K	Letter and sound fluency	1.0 letter
1	Word reading fluency	1.8 words
2	ORF	1.0 words
3	ORF	0.75 words
*4	ORF	0.3 words
4, 5-12	MAZE	0.25 words
Computation fluency		
K	Early Numeracy Task	0.3 problems
1	Early Numeracy Task/ Computation	0.4 -ENT or 0.3-computation problems
2	Computation Probes	0.3 problems
3	Computation Probes	0.3 problems
4	Computation Probes	0.3 problems
5	Computation Probes	0.5 problems
6-12	Computation Probes	0.3 problems

Fourth grade is a transition grade between ORF and MAZE. Interventionists can choose the most appropriate assessment based on student's data. The instrument needs to be documented in the intervention plan.

Computation can be calculated by counting problems correct or by counting digits correct. Please refer to the attached document for information on both methods. Interventionists may choose either method, but must stay with the same scoring method throughout the entire intervention period.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/[Progress Monitoring: Scoring Mathematics Computation Probes](#)

Percentage of Non-Overlapping Data- PDN

The percentage of non-overlapping data is a quantitative measure that evaluates the proportion of data points in the intervention phase that exceeds the median baseline score from the baseline phase. It is a common and effective measurement of the effectiveness of the intervention strategy. It is calculated by counting the number of favorable outcomes divided by the total number of measures and multiplied by 100. When graphed, PDN can show a discernible trend of the effectiveness of intervention. A calculator for PND is linked [here](#).

Reading Fluency Norms

Reading fluency norms are used to set goals and measure progress toward goals. They help to make effective and timely decisions for instruction and intervention. The 50th percentile should be used to gauge proficiency for the grade level. An article with more information and a fluency norms chart is linked [here](#).

TABLE 1
Oral reading fluency norms, grades 1-8

Grade	Percentile	Fall WCPM	Winter WCPM	Spring WCPM
1	90		81	111
	75		47	82
	50		23	53
	25		12	28
	10		6	15
	SD		32	39
	Count		16,950	19,434
2	90	106	125	142
	75	79	100	117
	50	51	72	89
	25	25	42	61
	10	11	18	31
	SD	37	41	42
	Count	15,896	18,229	20,128
3	90	128	146	162
	75	99	120	137
	50	71	92	107
	25	44	62	78
	10	21	36	48
	SD	40	43	44
	Count	16,988	17,383	18,372
4	90	145	166	180
	75	119	139	152
	50	94	112	123
	25	68	87	98
	10	45	61	72
	SD	40	41	43
	Count	16,523	14,572	16,269
5	90	166	182	194
	75	139	156	168
	50	110	127	139
	25	85	99	109
	10	61	74	83
	SD	45	44	45
	Count	16,212	13,331	15,292
6	90	177	195	204
	75	153	167	177
	50	127	140	150
	25	98	111	122
	10	68	82	93
	SD	42	45	44
	Count	10,520	9,218	11,290
7	90	180	192	202
	75	156	165	177
	50	128	136	150
	25	102	109	123
	10	79	88	98
	SD	40	43	41
	Count	6,482	4,058	5,998
8	90	185	199	199
	75	161	173	177
	50	133	146	151
	25	106	115	124
	10	77	84	97
	SD	43	45	41
	Count	5,546	3,496	5,335

WCPM: Words correct per minute
SD: Standard deviation
Count: Number of student scores

Instructions for Reporting

At the end of each grading period, the interventionist will complete a summary report form, make a copy of the student's Intervention Service document log, and/or Lift-Off report, and a copy of the student's progress monitoring graph to be shared with the campus SIT representative. A link to the form can be found on the [district website](#), under Rtl on the special programs page. You will find a page titled Rtl Resources for Teachers. Click the link titled Rtl progress summary form.

Intervention Service Documentation/Intervention Log				
Student Name:				
Homeroom teacher:		Grade level:		
Tier II <input type="radio"/>		Tier III <input type="radio"/>		
Concern: <input type="radio"/> reading <input type="radio"/> math <input type="radio"/> behavior		Interventionist:		
Targeted Skill(s):				
Date/Time	Targeted Skill: <small>Write the corresponding number from list above.</small>	Strategy	Progress Monitoring	Notes

Decision Making

Questions to ask:

- On what grade level are they working?
 - Use baseline goals, ORF norms, classroom data and other assessments to determine actual grade level of performance.
 - Below grade level, at grade level, above grade level.
- Are they making growth?
 - Use PDN standards to determine the effectiveness of the intervention strategies and to guide movement within the MTSS framework. Use the [PND calculator](#) or the formula: number of favorable outcomes divided by the total number of measures and multiplied by 100 to calculate PND.

Fluency Data vs. Correlating Data

Using fluency data and correlating data is the key to being able to evaluate the whole picture of a student's progress in intervention.

Correlating data is used to help determine target skills to address in the intervention plan. Correlating data could be MAP results and the diagnostics that are included in the student profile report, unit and classroom assessments, running records that document the kinds of mistakes a reader makes as well as evaluates the comprehension level of a reader, other classroom data that allows the committee to delve into why a student is struggling. The fluency data or progress monitoring data is used to evaluate the effectiveness of the intervention strategy. If a strategy is not effective, the SIT must make changes to the strategy or consider other intervention options.

Determining Effectiveness of an Intervention Strategy

The SIT will use the following standards to determine the effectiveness of the intervention strategies. A decision making flowchart is linked [here](#). The flowchart should be used in the SIT meeting to guide decision-making.

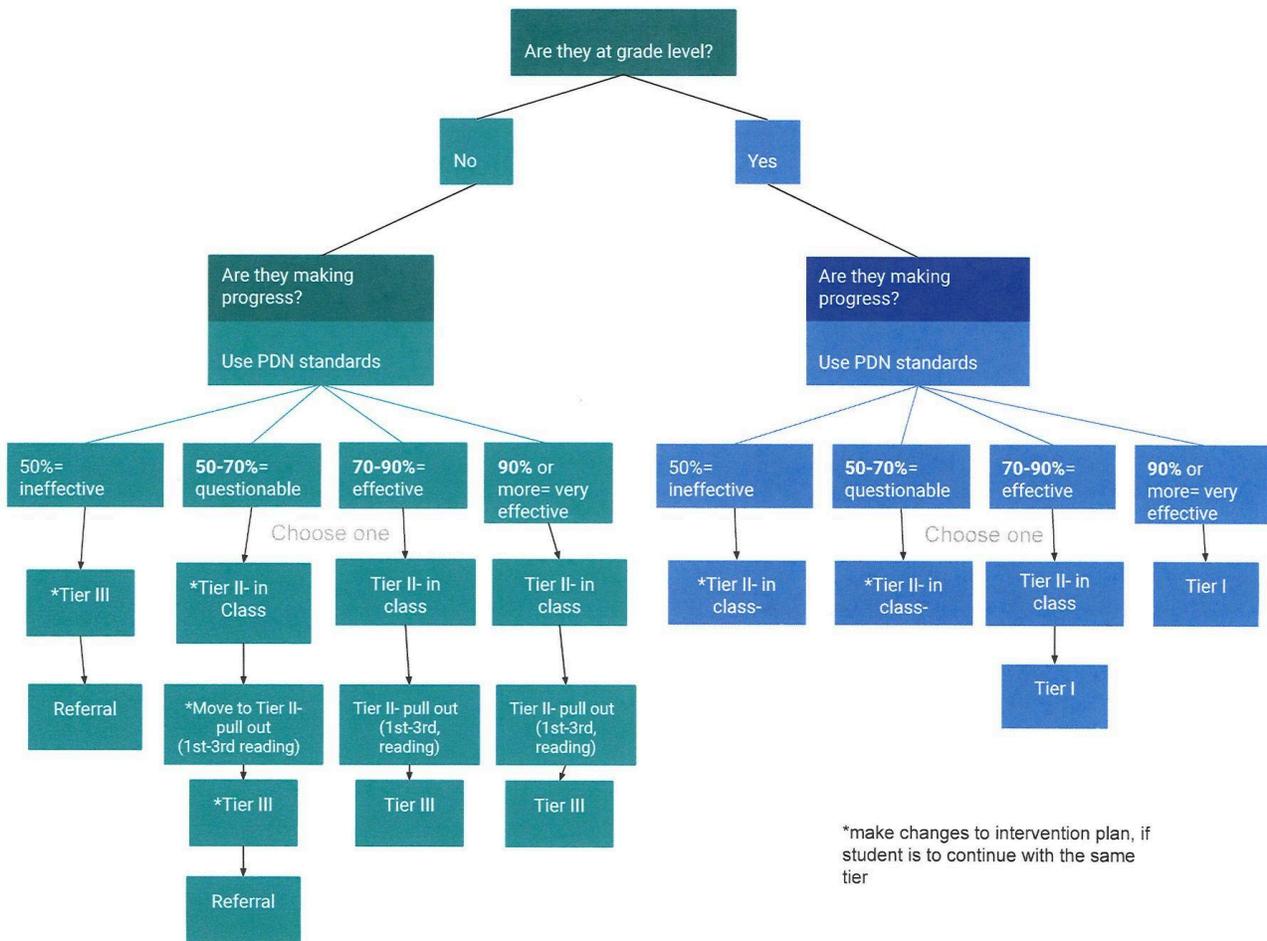
90% or more= very effective (Tier I or II, depending on grade level comparison)

70-90%= effective (Tier I or II, depending on grade level comparison)

50-70%=questionable (Tier III or referral)

50%= ineffective (Tier III or referral)

***when a student is going to remain in the same tier, but is showing ineffective or questionable growth, the intervention plan must be adjusted**



Resources

[chrome-extension://efaidnbmnnnibpcajpcgiclfindmkaj/How To: Assess Mastery of Math Facts With CBM: Computation Fluency Curriculum Based Measurement | Reading-Math-Assessment Tests | CBM Measurement | Intervention Central Percentage of Nonoverlapping Data \(PND\) Calculator](#)
[chrome-extension://efaidnbmnnnibpcajpcgiclfindmkaj/Progress Monitoring: Scoring Mathematics Computation Probes](#)
<https://dibels.uoregon.edu/materials/dibels>
[MTSS Making Data Simply](#)- Dr. Andrea Ognosky

Questions???

Complete this [form](#) with any questions/ feedback