Section 2

Progress Monitoring



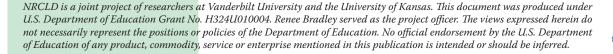
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OVERVIEW

Progress monitoring is a set of assessment procedures for determining the extent to which students are benefiting from classroom instruction and for monitoring effectiveness of curriculum. A fundamental assumption of education is that students will benefit from high-quality instruction. That is, typically, students will learn and achieve the skills and content taught in the classroom. For students who are not responsive to classroom instruction, alternative interventions can be provided and again the students' response to that instruction can be monitored. Progress monitoring is a valid and efficient tool for gauging the effectiveness of instruction, determining whether instructional modifications are necessary, and providing important information for eventual classification and placement decisions.

Information about progress monitoring is rapidly expanding. The National Center on Student Progress Monitoring, sponsored by the U.S. Office of Special Education Programs (OSEP), provides an array of free, web-based progress monitoring resource materials at www.studentprogress.org.





Definition and Features

Progress monitoring is the scientifically based practice of assessing students' academic performance on a regular basis for three purposes:

- 1. To determine whether children are profiting appropriately from the instructional program, including the curriculum;
- 2. To build more effective programs for the children who do not benefit; and
- 3. To estimate rates of student improvement.

In a responsiveness to intervention (RTI) paradigm, progress monitoring assists school teams in making decisions about appropriate levels of intervention (National Center on Student Progress Monitoring, 2006).

The National Association of State Directors of Special Education (NASDSE) (2005, pp. 25-26) has identified nine essential characteristics for progress monitoring to be useful in an RTI context. Progress monitoring should do the following:

- Assess the specific skills embodied in state and local academic standards
- Assess marker variables that have been demonstrated to lead to the ultimate instructional target
- 3. Be sensitive to small increments of growth over time
- 4. Be administered efficiently over short periods
- 5. Be administered repeatedly (using multiple forms)
- 6. Result in data that can be summarized in teacher-friendly data displays
- 7. Be comparable across students
- 8. Be applicable for monitoring an individual student's progress over time
- 9. Be relevant to development of instructional strategies and use of appropriate curriculum that addresses the area of need

Progress Monitoring Within an RTI Model

Progress monitoring serves an important function in specific learning disabilities (SLD) determination. If applied rigorously, progress monitoring addresses the federal legal stipulation that students who are determined to have a disability have not benefited from general education instruction. If the student receives high-quality instruction, progress monitoring procedures can help school staff and parents determine the extent to which the student benefited.

Several types of assessments can provide information about the status of students' knowledge, skills, and abilities. Although practitioners sometimes interchange various progress monitoring procedures with school-wide screening and diagnostic tests, differentiating among these types of assessments is important. Table 2.1 highlights several distinguishing features of these three types of assessments.

Within an RTI model, progress monitoring serves various functions at each tier. The following

sections describe the roles progress monitoring can play within each tier.

PROGRESS MONITORING IN TIER 1

In Tier 1, progress monitoring procedures serve several functions.

Progress monitoring versus general screening. Proactive assessment procedures are best employed at least three times per year (beginning, middle, and end) and are used as general screening procedures for all students. School-wide screening and progress monitoring can serve a similar function in this regard. Screening of all students is used to determine those students who may be at risk by comparing their performance relative to a criterion measure. Progress monitoring displays individual student growth over time, to determine whether the student is progressing as expected in the generally effective curriculum.

Curriculum-based measurement (CBM) as

Table 2.1. Purposes of Three Types of Assessment

	Screening	Progress Monitoring	Diagnostic Tests
Population	School-wide	Class/small group/student	Individual student
Uses	Uses Broad Index Specifi or be		Specific academic domains of knowledge, skills, or abilities
Frequency	Yearly/3x/monthly	≤ 3 weeks/weekly/daily	Yearly
Purpose	Identify students who are at risk	Regroup students	Identify specific student deficits
Focus	School focus	Student/class focus	Student focus
Instruction	Class/school instruction and curriculum decisions	Within intervention (curriculum/instruction)	Selecting curriculum and instructional methods
Implications	As first step for intervention planning Continue or revise placement		Planning or specifying intervention

primary method of progress monitoring. In addition to general screening measures, a system of progress monitoring is recommended at Tier 1 for all students. CBM assesses the different skills covered in the annual curriculum in such a way that each weekly test is an alternate form. The assumption is that these alternate forms are comparable in difficulty. For example, in September, a CBM mathematics test assesses all of the computation, money, graphs/ charts, and problem-solving skills to be covered during the entire year. In November and/or February and/or May, the CBM tests the annual curriculum in exactly the same way (but with different items). Therefore, scores earned at different times during the school year can be compared to determine whether a student's performance is increasing, decreasing, or staying the same (National Center on Student Progress Monitoring, 2006). If the scores are increasing, this indicates that the student's skills are improving. If the scores are remaining the same or decreasing over time, this indicates that a student is not benefiting from the intervention (instruction or curriculum) and a change is needed in the student's intervention program. The following are examples of CBM for reading and math:

- Monitoring Basic Skills Progress (Pro-Ed Online, 2006)
- Dynamic Indicators of Basic Early Literacy Skills (DIBELS, 2006)
- Intervention CBM probes (Intervention Central, 2006)

The results of progress monitoring in Tier 1 inform decision making about classroom instruction in two main ways:

- 1. At the class level, average performance of all students combined and their rate of growth can help a teacher or administrator determine how to create instructional and curricular change so that all students reach proficiency on the skill.
- 2. At the individual student level, schools use predetermined cut points to identify students in need of more extensive and intensive interventions in Tier 2 and beyond.

Progress Monitoring in Tier 2 and Beyond

In Tier 2 and beyond, the purpose of progress monitoring shifts slightly. The main purpose of progress monitoring of Tier 2 and beyond interventions is to determine whether the intervention is successful in helping the student learn at an appropriate rate. Decision rules need to be created to determine when a student might no longer require Tier 2 and beyond services and can be returned to the general classroom (Tier 1), when the intervention needs to be changed, or when a student might be identified for special education. Timely decisions about student progress at this tier are critical for the student's long-term achievement. The following research-based recommendations are made to facilitate timely decision making:

- 1. Assess student progress using CBM in Tier 2 and beyond twice per week
- 2. Chart these results and analyze student progress regularly
- 3. Use preset rules to determine when a student is not adequately responding to an intervention (commonly suggested rules are that four consecutive data points below the goal line warrant changes to the intervention; four above the goal line warrant raising the goal.)

(Fuchs, Fuchs, Hintze, and Lembke, 2006; National Association of State Directors of Special Education, 2005)

PROGRESS MONITORING IN SPECIAL EDUCATION

In special education, progress monitoring also serves other purposes. First, the progress monitoring done to this point provides systematic, reliable, and multiple data points that can inform the eligibility determination decision and subsequent development of specially designed instruction to meet the student's individual needs. Second, progress monitoring is a requirement of the individualized education program (IEP) and provides information about student progress toward short-term objectives and annual goals.

Changing Structures, Roles, and Responsibilities

The implementation of a progress monitoring system within an RTI model will require shifts in school structures as well as in the roles and responsibilities of educators.

Impact on conceptualizations of SLD. Under a system of progress monitoring, SLD is primarily regarded as low achievement relative to classroompeer functioning. If, for example, the bottom 25 percent of the class is selected for further progress monitoring or for placement in secondary interventions, then a student's designation for Tier 2 and beyond intervention could vary depending upon what class he or she is in. The use of a dual-discrepancy model to identify students whose performance is low and have low rates of progress can help remove some of this variability. Continued progress monitoring is required through the tiers to be sure that students are responsive to all tiers of instruction. If a student responds (or makes progress) in secondary or tertiary levels of intervention, the school will have to decide whether progress is great enough that the student is ready to return to Tier 1 (general education class) or whether the student should remain in the more intense instruction to maintain levels of performance comparable to peers. Students identified as in need of secondary or tertiary interventions still may require more in-depth assessment to determine appropriate instructional interventions. As progress is measured, educators obtain information about the student's level of performance and rate of gain. The measures, however, do not provide information to help educators make decisions about the student's

ability or processing deficits associated with learning and performance.

School structural changes. General education teachers will need to consider and create (or select) appropriate assessments. These assessments will need to be consistent and similar in structure and appropriate to grade level. Another consideration is the relationship of these tools to school content and performance standards. Because best practice suggests that assessments be conducted at least on a weekly basis, teachers and schools need to develop the infrastructure to do this. A process for analyzing results at both the classroom level (to determine individual student performance) and the school level (to determine classroom performance) also will need to be developed. Table 2.2 on page 2.6 describes changes that will need to occur across different areas of the school under progress monitoring.

Teacher training issues. The individual assessments and recording of information comprise a fairly straightforward process. Many teachers already may be familiar with the concepts or be able to quickly learn and implement them after a professional development session. (See Resources on page 2.21 for information about web sites, published software, and texts for materials to provide professional development.) Teachers will need to learn to analyze results to determine which students require the next tier of intervention and when such a move should take place. Incoming teachers also will require professional development on the particulars of the school's system of progress monitoring.

Table 2.2. Changing Different Areas of the School Under Progress Monitoring

General Education*	Specialist/Support Staff*	Administration*
General Education* Implement the system of progress monitoring across content (reading, writing, math) areas Administer assessments at least every three weeks or more frequently (weekly or twice a week, if needed); chart and evaluate results Identify students for diagnostic testing or for secondary intervention Provide aggregate data of classroom results to principal	Specialist/Support Staff* Monitor progress of students in secondary/tertiary tiers of intervention in a particular content area Administer relevant assessments; chart and evaluate results Identify when a student is making adequate progress in a more intense instructional level Collaborate with the general education teacher to assist in determination of students for secondary/tertiary tier intervention and to provide	Administration* Lead effort to create infrastructure for progress monitoring Provide necessary technology, materials, and resources Provide initial and continuing professional development opportunities for new staff and refresher training for other staff Ensure fidelity of implementation through routine, periodic observation and discussions with staff Research the availability
sting or for secondary tervention rovide aggregate data of	Collaborate with the general education teacher to assist in determination of students for secondary/tertiary tier	tion through routine, periodic observation and discussions with staff Research the availability of CBM options with staff committee (or entire staff) to select appropriate tools and methods. Ensure this system meets multiple requirements, including determination of adequate yearly progress (AYP) for No Child Left Behind Act of 2001 (P.L. 107-110) (NCLB 2001)
		Determine when/whether classroom performance warrants intervention (i.e., entire class performance is considerably lower than other classes in the same grade level) Review aggregate data of classrooms and provide feedback to teachers

^{*}General Education includes the general education teacher

^{*}Specialist/Support Staff includes the special education teacher, reading or learning specialists, related services personnel, paraprofessionals

^{*} Administration includes building principals and assistants as well as curriculum or assessment specialists at building or district levels



The figures on these pages (2.1 through 2.4) are offered as illustrations based on a variety of research activities. We do not endorse a particular progress monitoring method. To find an evaluative report about the many and varied progress monitoring systems, refer to the tools on the OSEP-sponsored National Center on Student Progress Monitoring web site (www.studentprogress.org and www.studentprogress.org/chart/chart.asp).

Figures 2.1 through 2.4 (Fuchs & Fuchs, 2006) illustrate the use of curriculum-based measurement to monitor progress in reading. As students read passages, such as the one depicted in Figure 2.1, an education professional (teacher or paraprofessional, for example) records the number of words read correctly per minute. The student's scores are graphed, as in Figures 2.2 and 2.3 on page 2.8. Over time, the graphs will depict whether the student is mak-

Figure 2.1. CBM Passage for Correct Words per Minute

Mom was going to have a baby. Another one! That is all we need thought Samantha who was ten years old. Samantha had two little brothers. They were brats. Now Mom was going to have another one. Samantha wanted to cry.

"I will need your help," said Mom. "I hope you will keep an eye on the boys while I am gone. You are my big girl!"

Samantha told Mom she would help. She did not want to, though. The boys were too messy. They left toys everywhere. They were too loud, too. Samantha did not want another baby brother. Two were enough.

Dad took Samantha and her brothers to the hospital. They went to Mom's room. Mom did not feel good. She had not had the baby. The doctors said it would be later that night. "I want to wait here with you," said Samantha. "Thank you Samantha. But you need to go home. You will get too sleepy. Go home with Grandma. I will see you in the morning," said Mom.

That night Samantha was sad. She knew that when the new baby came home that Mom would not have time for her. Mom would spend all of her time with the new baby.

The next day Grandma woke her up. "Your mom had the baby last night," Grandma said. "We need to go to the hospital. Get ready. Help the boys get ready, too."

Samantha slowly got ready. She barely had the heart to get dressed. After she finished, she helped the boys. They sure were a pain! And now another one was coming. Oh brother!

Figure 2.2. Sarah's Progress: Words Read Correctly

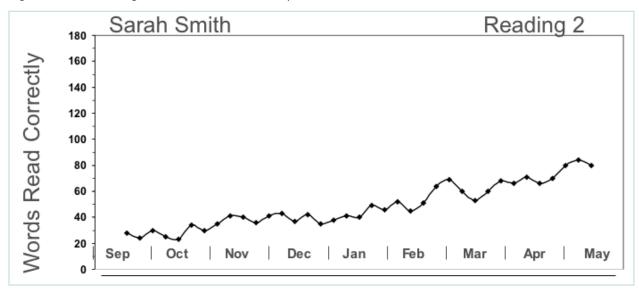
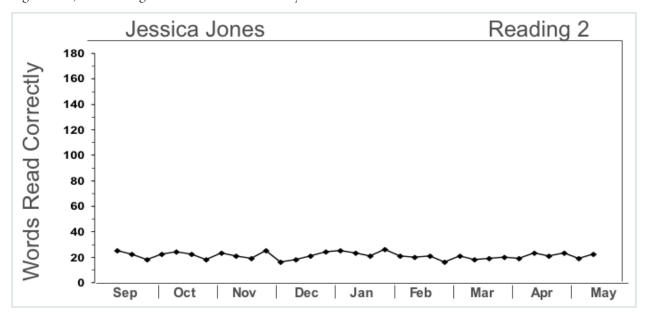


Figure 2.3. Jessica's Progress: Words Read Correctly



ing progress, as shown in Sarah's graph in Figure 2.2, or not making progress, as shown in Jessica's graph in Figure 2.3. School teams can then use these graphs to help determine student groups or to make decisions about possible changes in instruction or curriculum.

Figure 2.4 illustrates how cut scores can be used in considering whether a student is at risk. At the beginning of second grade, if a student scores fewer than 15 words read correctly per minute, educators may suspect the child is at risk and implement weekly monitoring of the child's progress. After five

weeks of Tier 1 (general education) instruction, if the CBM graph shows the student's rate of increase is less than one word read correctly per week, the student is determined to be at risk and is moved to Tier 2 instruction.

If at the end of Tier 2 instruction, the graph continues to show less than one word a week increase in reading fluency *and* the student is reading fewer than 40 words correctly per minute, he or she is considered to be a nonresponder and is referred for a comprehensive evaluation.

Figure 2.4. Grade 2 CMB Passage Reading Fluency

Beginning of year

< 15 words per minute (suspected risk) Weekly monitoring

First 5 weeks of Tier 1 instruction

< 1 word weekly increase (risk) Tier 2 instruction

End Tier 2 instruction

< 1 word weekly increase *and* < 40 words per minute (nonresponder) Comprehensive evaluation



The figures on these pages (2.5 through 2.10) are offered as illustrations based on a variety of research activities. We do not endorse a particular progress monitoring method. To find an evaluative report about the many and varied progress monitoring systems, refer to the tools on the OSEP-sponsored National Center on Student Progress Monitoring web site (www.studentprogress.org and www.studentprogress.org/chart/chart.asp).

Figures 2.5 through 2.10 (Fuchs & Fuchs, 2006) illustrate the use of curriculum-based measurement to monitor progress in mathematics. Each CBM assessment contains problems representative of all of the concepts that will be covered during the year (Figure 2.5). Numerals within problems are chosen at random, depending on the specifications of the problem types. In addition, problem types are placed randomly on the page.

Figure 2.5. CBM Assessment in Mathematics

heet #1 assword: ARM		Computation 4		
Vassword: ARM		Date		
A	В	С	D	E
$\frac{3}{7} - \frac{2}{7} =$	$1\frac{6}{7} + 3 =$	4)6	6)78	875 x_7
6 <u>x 7</u>	9 x 0	н 244 х_7	6)48	5)20
к 2)50	6144 - 4420	33 x 10	N 6 × 0	7)30
95225 +75268	8)32	1156 2824 + 83	s 7 <u>4</u> - 2 =	38 × 33
$\frac{3}{5} + \frac{1}{5} =$	982 - 97	w 9 x 5	x 4 <u>x 1</u>	7)56

Figure 2.6 shows the results of a computer-based CBM assessment for an individual student. For students whose progress is unacceptably poor, CBM is used for individual decision making. In this figure, more data points are needed before a decision can be made about this student's progress.

Figure 2.7 shows a class summary of a computer-based CBM assessment. In general education, the progress-monitoring focus is on the class report to enhance instruction for *all* students and to identify which students need more help. Figure 2.7 specifies this information clearly for Mrs. Smith's class.

Figure 2.6. Student Report of CBM Mathematics Assessment Scores

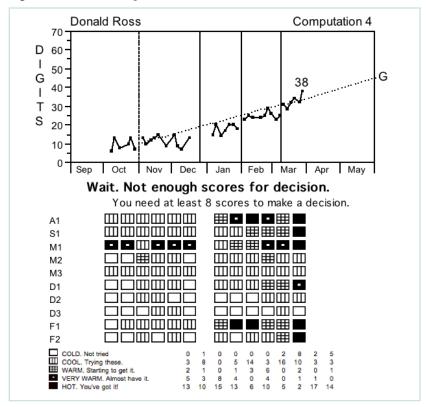
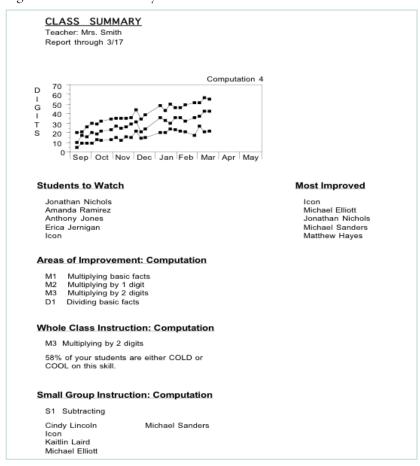


Figure 2.7. Class Summary of CBM Mathematics Assessments



Another report available through this CBM tool is the class skills profile (Figure 2.8), which clearly illustrates each student's progress toward mastery of the mathematics concepts tested. The report uses icons to show level of achievement (from "not tried" to "you've got it!"), allowing the teacher to see the big picture of her students' accomplishments at a glance.

Figure 2.9 on page 2.13 shows a report ranking the scores of every student in Mrs. Smith's class. The ranked scores consist of an average of each student's last two CBM scores. The last column, Growth, is each student's average weekly increase, or slope.

The final report in this CBM tool, Figure 2.10 on page 2.13, provides the overall class scores and identifies students whose progress is poor compared to peers. Identification is based on dual discrepancy, in which the student's overall score is low and rate of growth is flat.

Figure 2.8. CBM Class Skills Profiles

CLASS SKILLS PROFILE - Com	putat	ion								
Teacher: Mrs. Smith										
Report through 3/17										
,										
Name	A1	S1	M1	M2	МЗ	D1	D2	D3	F1	F2
Adam Qualls		•		Ш	Ш	Ш	$\overline{\mathbb{m}}$	Ш		Ш
Amanda Ramirez		$\overline{\mathbb{m}}$		Ш	Ш	m	Ш	\Box		\Box
Anthony Jones		Ш	•	Ш	Ш	Ш	Ш	Ш	\Box	\Box
Aroun Phung							m	m		
Becca Jarrett					$\overline{\mathbb{m}}$	•	m	m		
Charles McBride					m		m	m		
Cindy Lincoln		$\overline{\Box}$							$\overline{\Box}$	
David Anderson	<u> </u>	\Box		•	$\overline{\Box}$	\blacksquare	$\overline{\Box}$	$\overline{\Box}$		
Emily Waters				•						
Erica Jernigan					$\overline{\Box}$	\Box	$\overline{\Box}$			
Gary McKnight					Ш		Ш	Ш		
Icon										
Jenna Clover		•					\Box			
Jonathan Nichols		\blacksquare		•	$\Box\Box$	•			$\Box\Box$	
Jung Lee			•							
Kaitlin Laird		\Box	•		$\Box\Box$		$\Box\Box$			
Kathy Taylor							\prod			
Matthew Hayes							\prod			
Michael Elliott					\prod		\prod	$\Box\Box$	$\Box\Box$	
Michael Sanders					\prod		\prod			
Samantha Spain										
Vicente Gonzalez				•					-	
Victoria Dillard						•				
Yasmine Sallee								-		
COLD. Not tried	0	1	0	0	0	0	2	8	2	5
COOL. Trying these.	3	8	0	5	14	3	16	10	3	3
WARM. Starting to get it.	2	1	0	1	3	6	0	2	0	1
VERY WARM. Almost have it.	5	3	8	4	0	4	0	1	1	0
HOT. You've got it!	13	10	15	13	6	10	5	2	17	14
— 1101. Tod ve got it:	13	10	10	10	U	10	0	-	17	

Figure 2.9. Rankings Showing Average of Last Two CBM Scores and Slope

Teacher: Mrs. Smith		
Report through 3/17		
<u>Name</u>	<u>Score</u>	Growth
Samantha Spain	57	+1.89
Aroun Phung	56	+1.60
Gary McKnight	54	+1.14
Yasmine Sallee	53	+1.34
Kathy Taylor	53	+1.11
Jung Lee	53	+1.23
Matthew Hayes	51	+1.00
Emily Waters	48	+1.04
Charles McBride		+1.12
Michael Elliott	42	+0.83
Jenna Clover		+0.78
Becca Jarrett		+1.14
David Anderson		+0.79
Cindy Lincoln	36	+1.04
Kaitlin Laird	35	+0.71
Victoria Dillard	34	
Vicente Gonzalez	29	+0.28
Adam Qualls	26	+0.60
Michael Sanders	25	+0.70
Jonathan Nichols	25	+2.57
Amanda Ramirez	23	+0.85
Anthony Jones		
Erica Jernigan		+0.23

Figure 2.10. Overall Class Scores

Teacher: Mrs. Smith		
Report through 3/17		
Score		
Average Score	39.5	
Standard deviation	12.6	
Discrepancy criterion	26.9	
Slope		
Average slope	+0.98	
Standard deviation	0.53	
Discrepancy criterion	+0.45	
Students identified with dual discrepa	incy criterion	
·	Score	<u>Slope</u>
Anthony Jones	19.0	+0.05
Erica Jernigan	18.0	+0.23

A Child Sand Procedures Ols

The following activities (Activity 2.1: Essential Task List for Progress Monitoring, Activity 2.2: Standards for Judging High-Quality Progress Monitoring, and Activity 2.3: Internal Resources Needed to Implement Progress Monitoring) provide ways for your organization to think about implementing progress monitoring.

Essential Task List for Progress Monitoring

Directions: In the second column, write the name(s) of the individual or team who will assume responsibility for the task identified in the first column. In the third column, write the deadline for or the status of the task.

Tier 1

Task	Responsible Individual/ Team	Timeline/Status
Within the relevant content area, review the progress monitoring measure or tool selected for Tier 1 to determine whether content is aligned with your curriculum.		
Once a tool has been selected, determine and secure the resources required to implement it (e.g., computers, folders/copies, testing areas).		
Determine initial professional development needs and continuing professional development support.		
Implement a system of data collection and progress monitoring that includes determining both level and growth rate.		
Administer the progress monitoring measure frequently enough to assess a learner's responsiveness. At Tier 1, screening is three times a year, with routine monitoring weekly or twice weekly.		
Monitor results at the individual student level and make decisions about reasonable cut scores to determine movement to Tier 2 and beyond.		
Monitor results at the classroom level and make decisions about when teachers or instructional programs require more scrutiny and support.		

Tier 2 and Beyond

Task	Responsible Individual/ Team	Timeline/Status
Implement a system of data collection and progress monitoring that includes determining both level and growth rate.		
Within the relevant area of focus for the intervention, review the progress monitoring measure or tool selected for Tier 2 and beyond to determine whether content is aligned with the intervention.		
Administer the progress monitoring measure frequently enough to assess a learner's responsiveness. At Tier 2, two to five times per week is the research-based recommendation.		
Organize results to provide a profile of the student's progress within this tier. This could be a graph of test scores supplemented with student work samples.		
Monitor results to determine whether a student is responding to the intervention.		
Develop decision rules about when to return a student to Tier 1, when to continue with Tier 2 and beyond, and whether further scrutiny of student performance for special education is warranted.		

Special Education

Task	Responsible Individual/ Team	Timeline/Status
Implement a system of data collection and progress monitoring that includes determining both level and growth rate.		
Include progress monitoring records from Tier 1 and Tier 2 and beyond when making decisions regarding special education evaluation/eligibility.		
Ensure that the special education teacher receives progress monitoring results for the individual student <i>along with</i> evidence gathered during the eligibility process.		
Develop progress monitoring measures aligned with the students' annual goals and short-term objectives and include these measures on the individualized education program (IEP).		
Administer the measure frequently enough to assess a learner's responsiveness.		

Standards for Judging High-Quality Progress Monitoring

To find an evaluative report about the many and varied progress monitoring systems, refer to the tools on the OSEP-sponsored National Center on Student Progress Monitoring web site (www.studentprogress.org and www.studentprogress.org/chart/chart.asp).

Directions: Read each of the standards, which have been identified as mechanisms for judging high-quality progress monitoring. The checklist is formatted so that you can indicate current and planned implementation.

- If the practice has been implemented, indicate that with a checkmark $(\sqrt{})$.
- If the practice is being developed, rank by priority: 1 = highest priority through 3 = lowest priority.

	Status	
Standard		Priority (1-2-3)
Scientific, research-based instruction includes the continuous progress monitoring of student performance across all tiers.		
Teachers follow a designated procedure and schedule for progress monitoring and for regrouping students as needed.		
Measures are administered frequently to inform instruction and curricular placement decisions (i.e., in Tier 1, at least every three weeks; in Tier 2 and beyond, one to three times per week; in special education, three to five times per week).		
Progress monitoring occurs in all tiers (including general education).		
Progress monitoring measures are appropriate to the curriculum, grade level, and tier level.		
Data resulting from progress monitoring are documented and analyzed.		
Progress monitoring uses a standardized benchmark by which progress is measured and determined to be either sufficient or insufficient.		
Teachers use progress monitoring data to evaluate instructional effectiveness and to be informed about the potential necessity for changing the instruction.		
An established data-management system allows ready access to students' progress monitoring data.		
After progress monitoring, a graph is completed to display data for analysis and decision-making and to indicate percentages of students at risk, at some risk, and at low risk.		

Continued on page 2.19

Standards for Judging High-Quality Progress Monitoring, Continued

Standard		tus
		Priority (1-2-3)
Staff members receive training in the administration and interpretation of progress monitoring measures.		
The school designates reasonable cut scores and decision rules for the level, slope, or percentage of mastery to help determine responsiveness and distinguish adequate from inadequate responsiveness.		
Cut scores are reviewed frequently and adjusted as necessary.		
The school provides a rationale for the cut scores and decision rules (e.g., normative or specific criterion reference).		

(Mellard & McKnight, 2006)

Internal Resources Needed to Implement Progress Monitoring

Directions: In *Activity 2.2: Standards for Judging High-Quality Progress Monitoring*, you identified which progress monitoring standards had been implemented in your school and which standards still need attention. In the space below, list the resources (material, curriculum, space, equipment, and people) your school will need to effectively implement progress monitoring.

Material/Curriculum	Space/Equipment	People

Resources/Materials

The following resources may support your implementation of progress monitoring efforts. NRCLD does not endorse these products; these resources are intended to be a source of information about programs and publications that will help teachers, principals, and district personnel in their choice of materials that can be used by skilled teachers to provide effective instruction and successfully implement an RTI program. Whether or not a program or publication has been listed does not constitute endorsement or lack of endorsement by NRCLD. These resources do not constitute an "approved" or "required" list. Also, many potentially useful programs or publications may not be listed here. We hope that readers will complete careful reviews of available alternatives.

Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

http://dibels.uoregon.edu/index.php

This site offers an assessment system for screening student performance and measuring student progress toward goals in reading. Generic passages, which are independent from any particular basal reading series, also may be used to evaluate the effectiveness of reading instruction through the graphing of student reading data. Browsers must pay to view materials from this site.

Едснескир

http://www.edcheckup.com

This site offers an assessment system for screening student performance and measuring student progress toward goals in reading. Generic passages, which are independent from any particular basal reading series, also may be used to evaluate the effectiveness of reading instruction through the graphing of student reading data. Browsers must pay to view materials from this site.

EDPROGRESS

http://www.edprogress.com

EdProgress focuses on assessment, large-scale testing and accountability, and systemic reform. With research-proven training materials, measurement tools, reporting systems, and teacher training interventions, EdProgress helps teach-

ers become more focused on teaching and learning for all students. Browsers must pay to view materials from this site.

Evidence-Based Progress Monitoring and Improvement System http://www.aimsweb.com

AIMSweb® is a formative assessment system that informs the teaching and learning process by providing continuous student performance data and reporting improvement to students, parents, teachers, and administrators to enable evidence-based evaluation and data-driven instruction. Browsers must pay to view materials from this site.

McGraw-Hill Digital Learning

http://www.mhdigitallearning.com

McGraw-Hill Digital Learning provides research-based, standards-aligned technology solutions that improve student performance and teacher productivity.

INTERVENTION CENTRAL

http://www.interventioncentral.org

This site offers free tools and resources to help school staff and parents promote positive classroom behaviors and foster effective learning for all children and youth. The site was created by Jim Wright, a school psychologist from Syracuse, N.Y. Materials on this site are free.

MINNESOTA READING EXCELLENCE ACT http://education.umn.edu/CI/MREA/CBM/cbmMOD. html

This is a progress-monitoring module written by Stan Deno. The purpose of this module is to provide an introduction to procedures for monitoring student reading progress in the classroom based on curriculum-based measurement (CBM). It also introduces the steps required to implement a system for screening and monitoring students in the area of reading and presents a summary of research on the effectiveness of these procedures. Throughout this module, the focus is on students who are not making satisfactory progress and are at risk of failing to develop basic reading skills. Materials on this site are free.

Monitoring Basic Skills Progress (MBSP) http://www.proedinc.com/store/index.php?mode=product_detail&id=0840

Developed by Lynn Fuchs, Carol Hamlett, and Douglas Fuchs, the MBSP is a computer program for automatically conducting curriculum-based measurement and for monitoring student progress in reading, math computation, and math concepts and applications. The computer will provide immediate feedback to students on their progress and provide individual and class-wide reports to teachers to help them plan more effective instruction. Browsers must order and pay for materials from this site.

National Center on Accessing the General Curriculum

http://www.cast.org/ncac/Curriculum-BasedEvaluations2913.cfm

This link goes directly to an article titled "Curriculum-Based Evaluations," by Tracey Hall, Ph.D., Senior Research Scientist, NCAC, and Missy Mengel, RA. The article contains links to several web sites related to progress monitoring.

National Consortium on Oral Reading Fluency http://nc-orf.uoregon.edu/orflinks.html

The purpose of this web site is to help integrate measurement within the decision-making process. Site developers believe that the profession needs to have immediate access to data, as primary information from research studies, as participants in research and development efforts to collect such data, and as end users who would like to upload or download normative performance levels. This web site is designed to serve all three purposes. The final use of the web site is to link with others, both directly as regional contacts and through the links to other sites that reflect similar efforts elsewhere. Materials on this site are free.

Read Naturally

http://www.readnaturally.com/

Read Naturally combines three research-proven strategies to develop the reading fluency of students served in special education, as English language learners (ELL), in Title I, and in general education. Browsers must order and pay for materials from this site.

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