



How to Track Classroom Reading Interventions

When students are on MTSS Tier 1/classroom academic intervention plans, the teacher must monitor those learners' progress to judge if the intervention is effective. Because instructional time is precious, instructors want to know in weeks—not months—whether interventions are working. The goal, then, is for teachers to have at their fingertips a short list of data-collection methods to provide a steady stream of information on student progress toward reading goals. These measures should be feasible to use in busy classrooms and sensitive to short-term gains in student reading skills (Howell, Hosp, & Kurns, 2008).

This handout reviews teacher-friendly approaches to track initial acquisition of reading skills, growth in skill fluency, improved retention of information from assigned readings, and student independent use of reading strategies.

Acquisition: Measure mastery. In the acquisition stage of learning, the student is in the process of acquiring a new skill but cannot yet perform it with accuracy. Examples of reading skills that young learners must acquire are:

- Letter naming/sounds
- Sight words
- Vocabulary terms and definitions

The simplest way to measure student progress on acquisition-stage goals is repeated assessment using flashcards. Here are the steps for carrying out this assessment:

1. *Prepare flashcards.* Create a flashcard deck with all items in the collection that the student is working to master (e.g., letter-naming).
2. *Define mastery.* Develop criteria to define mastery performance for any item: e.g., "Mastery Criteria: When shown a letter, the student names it correctly within 3 seconds. The student is able to repeat this performance 3 times without error."
3. *Collect baseline data.* At the start of the intervention, conduct a baseline assessment to determine which of the items the student already knows. Show the student each flashcard and ask the student to respond. Applying the mastery criteria, sort the cards into "known" and "unknown" piles. For example, if a student hesitates for longer than 3 seconds to identify a letter name, that flashcard would be placed on the "unknown" pile. Log the flashcard items that the student knows and the date of the baseline assessment. The remaining unknown items become the focus of the acquisition intervention.
4. *Monitor progress.* During the acquisition intervention, periodically (e.g., weekly) review the flashcards with the student. Whenever the student masters an additional item (according to your mastery criteria), log the mastered item and date.
5. *Graph cumulative progress.* Often at the acquisition stage, the student is working to master a fixed number of academic items, such as letter names. A logical way to graph the student's progress is to create a cumulative graph. This graph will display from week to week how many items the student has mastered from the start of the intervention to the current date.

NOTE: Teachers can access a free form, the Cumulative Mastery Record, to organize and collect acquisition-stage reading data at:

http://interventioncentral.org/sites/default/files/workshop_files/allfiles/cumulative_mastery_record_interactive.pdf



Fluency: Measuring proficiency. When a student has acquired a basic reading skill, the next learning goal is to develop greater fluency, or speed, in that skill. The measurement goal of this fluency stage of learning is to track both continued accuracy and increasing speed in performing that skill.

A useful way to assess a student's growing fluency (as well as accuracy) in foundation literacy skills is via curriculum-based measurement (CBM) -- a family of quick assessments of basic academic skills. While CBM covers a wide range of different assessments, all are brief; timed; use standard procedures to prepare materials, administer, and score; and include decision rules to help educators to make appropriate instructional decisions (Hosp, Hosp & Howell, 2007). When classroom interventions target growth in basic reading skills such as letter identification or reading fluency, CBMs are the formative assessment of choice to assess growth.

There are a variety of measurement products on the market that have been designed using CBM research. The example presented here is a widely-used battery of fluency assessments for reading called DIBELS Next: <https://dibels.org/dibelsnext.html>. DIBELS Next is a well-researched collection of assessments available to teachers at no cost to download, print, and use with their students.

The DIBELS Next measures shown in Table 1 are brief (ranging in administration time from 1 to 3 minutes), are given under standardized conditions, and yield diagnostic information about a student's speed and accuracy on tasks relevant to the components of reading.

Table 1: DIBELS Next: CBM Measures			
Measure	Reading Component(s) Assessed	Time to administer	Grade Range/Screening
First Sound Fluency (FSF). The examiner reads words aloud from a list. The student says the first sound for each word.	Phonemic Awareness	1 minute	<ul style="list-style-type: none"> • Kdg: Fall & Winter screenings
Letter Naming Fluency (LNF). The student reads aloud the names of letters from a sheet with randomly arranged letters.	Alphabetic Principle/ Phonics	1 minute	<ul style="list-style-type: none"> • Kdg: All year • Grade 1: Fall screening
Phoneme Segmentation Fluency (PSF). The examiner reads words aloud from a list. The student says the individual sounds making up each word.	Phonemic Awareness	1 minute	<ul style="list-style-type: none"> • Kdg: Winter & Spring screenings • Grade 1: Fall screening
Nonsense Word Fluency (NWF). The student reads aloud from a list of VC and CVC nonsense words.	Alphabetic Principle/ Phonics	1 minute	<ul style="list-style-type: none"> • Kdg: Winter & Spring screenings • Grade 1: All year • Grade 2: Fall screening
DIBELS Oral Reading Fluency (DORF). The student reads aloud from a text passage and is then asked to retell the main details of the reading.	Reading Fluency	1 minute for initial reading; 1 minute for student retell	<ul style="list-style-type: none"> • Grade 1: Winter & Spring Screenings • Grades 2-6: All year
Daze. The student is given a Maze passage to read silently. For each response item within the Maze, the student reviews 3 choices and selects the word that	Reading Comprehension	3 minutes	<ul style="list-style-type: none"> • Grades 3-6: All year



best completes the meaning of that part of the passage.			
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The DIBELS Next package of reading assessments can be used to screen an entire school for RTI/MTSS reading support. However, teachers also have the option to use DIBELS measures strategically with individual students, as the product includes national-benchmark performance norms for fall, winter, and spring.

Comprehension: Measuring retention of assigned readings. At times, the classroom teacher wishes to monitor whether intervention strategies to support comprehension are actually resulting in the student retaining more information from assigned readings. Here are two methods to assess retention of independent readings:

Readiness Assessment Tests (RATs). Readiness assessment tests (RATs) are a real-time means of measuring whether a student retains essential information from an assigned reading. RATs are brief teacher-made assignments that students complete *after* they have completed an assigned reading but *before* that reading is reviewed in class (Weinstein & Wu, 2009). RATs allow the instructor to monitor the retention of assigned readings for an individual student or the entire classroom.

The teacher identifies what information from the assigned reading is most relevant and constructs a small number of questions to test that knowledge. The instructor selects the RAT-question format: short-answer, essay, multiple-choice, or any combination. Finally, the teacher decides on the number of questions to include on the RAT, with 5 being a typical number.

Oral retell with rubric. Oral retell accompanied by a scoring rubric is a classroom-friendly way for an instructor to monitor student retention of key information from fiction and non-fiction reading assignments. The student completes the assigned reading. The instructor then prompts the student to recount the main points of that reading. During this exchange, the instructor uses a rubric to rate the organization and completeness of the student's retell. For example, the instructor may ask, "What are the main ideas that you recall from your reading?" and rate the student's response on a rubric as 3-*complete*, 2-*partial*, 1-*fragmentary*, or 0-*inaccurate/missing*.

Generalization: Measuring applied use of literacy skills. An important measurement target for teachers in higher grades is whether students are successfully and routinely using reading strategies independently. Work products and think-aloud checklists are 2 methods for monitoring student use of reading skills.

Work products. The teacher may be able to collect and review student work as a source of evidence that the reader is employing self-management strategies. Here are examples:

- Text annotation. Students can increase their retention of information when they interact actively with their reading by jotting comments in the margin of the text (Sarkisian et al., 2003). The teacher can collect assigned readings to review readers' annotations and verify successful use of the technique.
- Read-Ask-Paraphrase. When students create summaries of their readings, they improve recall of main ideas in the text. (Hagaman, Casey, & Reid, 2010). The student is trained to apply this sequence to each paragraph of an informational passage. (1) The student reads the paragraph with full attention; (2) the student summarizes the paragraph by asking, "What are the main idea and 2 important supporting details?"; and (3) the student paraphrases that paragraph summary in writing. The instructor can collect the student's written paragraph summaries to confirm use of the strategy as well as to monitor the quality of the summaries.

Think-aloud checklists. When students use cognitive strategies in their reading, these mental activities are hidden from observers. To make cognitive-strategy use visible, the teacher can create a checklist outlining the essential steps the student should follow. Next, the student is assigned a reading and prompted to perform a "think-aloud"—



narrating the steps he or she follows as well any problem-solving operations (Fisher & Frey, 2008). The checklist allows the teacher to verify whether the student is applying the correct steps in the proper sequence.

For example, an instructor may teach a student to use this simple set of fix-up strategies whenever encountering unknown words in a passage (McCallum et al., 2010);

- Reread the paragraph;
- Slow my reading;
- Focus my full attention on what I am reading;
- Underline any words that I do not know and try to figure them out from the reading (context).

The teacher also creates a reference checklist with these strategies. Then, if the student stumbles on a word when reading, the instructor can prompt the reader to apply the fix-up skills in a 'think-aloud'—and compare the actual strategy use to the checklist sequence to discover whether the student is able to use the skills correctly and in the proper sequence.

References

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