



# **Effective Instruction for Middle School Students with Reading Difficulties:**

## The Reading Teacher's Sourcebook

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### Chapter 2: Selecting and Administering Assessments



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# Chapter 2

## Selecting and Administering Assessments

### ASSESSING READING COMPREHENSION

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It is difficult to assess reading **comprehension** and vocabulary accurately using brief measures. Researchers are still working to determine effective and efficient practices for assessing vocabulary and comprehension that are useful for teachers to diagnose specific student difficulties and monitor students' progress. High-stakes criterion-referenced tests and standardized achievement tests provide indications that certain students struggle to comprehend text, as do general teacher observations and low grades in reading or language arts classes. Some schools administer alternate forms of the year-end high-stakes test at regular intervals throughout the year. This can provide insight into students' levels of progress on the kinds of items included on these tests, but may not be sufficient to inform a teacher about specific aspects of vocabulary or comprehension on which students need instruction.

If a teacher is using a systematic reading program or a supplemental program for struggling readers that includes assessments linked directly to the objectives being taught, the teacher can track outcomes of these assessments by using a form that indicates whether students have mastered each objective. For example, if the program includes instruction in and a related assessment of identifying cause and effect relationships in text, a teacher may use the results of the assessment to determine whether students need further instruction and practice in that skill.

Another tool that can be used to monitor students' progress in comprehension is close, ongoing observation of the student's successful or unsuccessful responses to instruction in the reading/language arts classroom. For example, students may be taught to apply comprehension strategies such as prediction and summarization, and teachers can observe the ease or difficulty with which students apply these strategies successfully. (See Chapter 6: Comprehension for examples of instructional approaches that can be used to teach these strategies.) Students who struggle to master comprehension objectives probably need more—or different kinds of—instruction in those aspects of comprehension.

Similarly, students who use a limited vocabulary in writing and speaking and who have difficulty understanding or remembering words in reading and listening probably require instruction designed to help them learn and remember words. (See Chapter 7: Vocabulary for examples of vocabulary instructional activities.) Whether students learn and master specific vocabulary words can be assessed with tests of those words' meaning, but it is important to assure that these tests are cumulative, including words taught in the past along with those recently taught. It is not productive for students to memorize a list of words for a test and then promptly forget them. If quality vocabulary instruction is part of the reading curriculum, students actively use the words they learn and remember them over time.

It may be useful for teachers to take notes about their observations of students' responses to vocabulary and comprehension instruction during regular reading classes using **anecdotal records**, since it can be difficult to remember details about student responses from day to day (or even from minute to minute) when teaching many sections of reading or language arts throughout the day.

## ASSESSING READING FLUENCY

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**Fluency** is the ability to read with speed, accuracy, appropriate phrasing, and expression. Reading fluency is usually measured as a combination of the rate and level of accuracy at which a student reads.

### Silent Reading Fluency

Secondary-level students typically spend most of their engaged reading time reading silently, but silent reading fluency can be difficult to assess since a teacher cannot directly observe whether the student actually reads all of the text passage or the number of errors the student makes while reading.

Group-administered standardized tests of silent reading fluency that can be used for screening and monitoring students' progress over time include the Test of Silent Word Reading Fluency (TOSWRF; Mather, Hammill, Allen, & Roberts, 2004) and the Test of Silent Contextual Reading Fluency (TOSCRF; Hammill, Wiederholt, & Allen, 2006). In both assessments, students are given printed words with no spaces between them, and the task is to put slashes between the words to separate them, with the score being the number of words correctly identified in 3 minutes. The TOSWRF, which consists of isolated words of increasing difficulty with no spaces between them (i.e., letlifthtriplantlettergrandly), has two equivalent test forms so that it can be given at the beginning and end of a period of time to measure student growth. The TOSCRF has four equivalent forms so that it can be given at intervals over a school year, and it consists of actual text presented with no punctuation or spaces between words (i.e., thatnightthemoonwasshiningtheyoungmanranintotheemptystreet).

Another kind of assessment sometimes used to measure silent reading fluency with comprehension is a **maze test**. In a maze assessment, students read text in which words have been removed at regular intervals (e.g., every seventh word) and replaced with blanks. For each blank, the student is given a choice of three words and must select the correct one (i.e., a multiple-choice format). Maze assessments can be administered timed or untimed. Currently, there is only preliminary evidence that the maze is a valid and reliable way to monitor growth in some aspects of comprehension (Espin & Foegen, 1996). On the other hand, timing the administration of maze passages can be used to evaluate the rate at which a student reads silently, along with the accuracy of selection of words that make sense, although much of the research on the validity of this assessment has been done with students at the elementary rather than secondary level (Shin, Deno, & Espin, 2000; Wiley & Deno, 2005). Computerized maze assessments have been developed and may be practical for use in middle schools to monitor student progress in fluency. See the Resources section for an example.

### Oral Reading Fluency

More often, teachers assess students' oral reading fluency (ORF) by listening to students read brief passages aloud for one to two minutes and recording the number of words read and errors made. By subtracting

the number of error words from the total number of words read, the teacher can determine the number of words correct per minute (WCPM). This kind of brief assessment can be used for:

- Screening students to identify struggling readers.
- Determining students' **instructional reading level** in order to match students with text of appropriate difficulty.
- Monitoring student growth over time in fluency and word recognition.

You may be wondering how using a 1- or 2-minute measure of oral reading fluency can be so beneficial. It has been found that scores on brief measures of oral reading fluency are highly predictive of scores on standardized tests of reading comprehension such as the Stanford Achievement Test, particularly in the elementary grades (see Fuchs, Fuchs, & Jenkins, 2001). This strong relationship between fluency and comprehension decreases as students are asked to read and comprehend increasingly complex text, but very low fluency at the middle school level can be a sign of serious reading problems.

On average, students in grades 6–8 are able to read grade-level material at about 120–150 WCPM, but researchers have not yet determined fluency benchmarks for struggling middle school readers. We provide broad guidelines for evaluating fluency scores below.

Figure 7 describes the procedures for administration of assessments of oral reading fluency using a digital kitchen timer. Note that these directions include locating passages for students to read. Alternatively, published sets of oral reading fluency passages are commercially available. See the Resources section for more information.

FIGURE 7. PROCEDURES FOR THE ADMINISTRATION OF AN ORAL READING FLUENCY ASSESSMENT.

1. **Find passages** of approximately 250 words, written on grade level. If you are assessing a student in seventh grade, the passage should be written on the seventh-grade level. (Note: Published passages for this purpose are commercially available for grades 6–8.)
2. **Prepare the passage** so that it is easily readable. Make a master copy on cardstock. The students will read from this copy, and it will not be marked. Make several copies on regular paper. You will use these regular copies to mark student errors.
3. **Sit next to the student.** Give the student the master copy and hold your copy on a clipboard. Older struggling readers can be anxious about making mistakes, so it is important that you mark errors discreetly so as not to distract the student.
4. **Ask the student to read the passage until you say, “Stop.”** Remind the student to read quickly, accurately, and to pay attention to what he or she is reading.
5. **Say, “Begin” and start the timer** for one minute as soon as the student begins reading.

*(figure continued on the next page)*

6. **Mark errors**, including mispronunciations, substitutions, reversals, or omissions. If a student does not say a word in 3–5 seconds, say the word and mark that word as an error. **DO NOT** count self-corrections or insertions as errors.
7. **Mark where the student stopped reading after one minute.** If the student is in the middle of a sentence when the timer goes off, allow the student to finish reading the sentence, but do not count any words read after one minute.
8. **Determine the student’s oral reading fluency score** (words correct per minute, or WCPM) by subtracting the number of error words from the total number of words read in one minute.

**Example:**

Your seventh-grade student, Alex, read 65 total words and made 6 mistakes. Subtracting his 6 error words from the 65 total words results in a score of 59 WCPM (65 total words read in a minute – 6 error words = 59 WCPM).

9. **Determine the student’s reading accuracy level** by dividing the WCPM by the total number of words read.

Alex read 59 words correctly in one minute. Dividing that number by the total words possible (or the total words read in the minute) and moving the decimal point two places to the left produces his percent accuracy score. Alex read 91 percent of the words accurately.  $59$  (correct words) /  $65$  (total words read in one minute) =  $.907$ , rounded to  $.91$ , or 91 percent accuracy.

10. **Compare student accuracy** to the benchmarks in Figure 98.

By comparing Alex’s accuracy to the benchmarks in Figure 98, you can see that grade-level material is at an instructional level for Alex. This material is actually borderline frustration level for him. Thus, he will probably need support when reading grade-level material. A logical goal would be for Alex to read grade-level material at 95 percent accuracy or higher by the end of the school year.

11. **Examine the student’s fluency score.**

Alex’s reading rate is 59 WCPM with 91 percent accuracy. This suggests that Alex can accurately decode most of the words in grade-level text but that he read the selection very slowly. The answers to the following questions would help guide the instructional plan for Alex:

- Does Alex’s rate of reading vary depending upon his interest in the text? When Alex selects the text he would like to read, does he read at a faster rate?
- Does Alex’s rate of reading improve when you ask him to read more quickly?
- Does Alex understand what he reads?

*(figure continued on the next page)*

Assuming that the rate of reading for Alex is low under most conditions, then establishing goals of improved rate of reading is appropriate. If Alex's rate of reading is related to his interests, then targeting motivation to learn a wider range of content may be a more appropriate goal.

If Alex has a generally low reading rate, he may need opportunities to practice fluent reading. Instructional activities for this purpose are provided in Chapter 8: Fluency.

*Adapted from Rasinski, T. V. (2004). Assessing reading fluency. Honolulu, HI: Pacific Resources for Education and Learning.*

When giving an ORF assessment, it can be useful to administer more than one passage and take the average score to get a more accurate score for each student. For example, using multiple forms, a teacher may have students read three eighth-grade ORF passages and take the average score from all three. Since students may vary in their background knowledge about certain passages, their scores could vary; taking an average will provide more accurate results.

Researchers have not determined whether having somewhat low oral reading fluency is reason for concern at the secondary level. Our best advice is to pay attention to students who score below 100 WCPM. These students may have problems decoding the words in the passage and may benefit from further assessment of word-recognition ability. Students who read very slowly may have low motivation to read and difficulty completing their work. If there are signs of either of these problems, especially in students with fluency levels below 100 WCPM, fluency instruction may be in order. Students with reading rates below 70 WCPM are likely to have more serious reading difficulties and may need instruction in fluency and word reading.

Teachers can use the same ORF assessment to determine a student's reading accuracy level. This information can help a teacher decide what level of text a student can read independently and what text a student may need more support with in order to be successful. See Figure 98 for accuracy levels commonly associated with the independent, instructional, and frustration reading levels. (Note that these levels are determined differently in various published **informal reading inventories** but that the ones we have included are in common use. These are meant to be guidelines, not "hard and fast" rules.) The **independent reading level** (also called the "homework level") is usually described as the level of difficulty of text that the student can read on his or her own, without support. Text in the **instructional reading level** is best for teaching students to be better readers. This level includes text that students can read with assistance, or instruction. Text in the **frustration reading level** is probably too difficult for the student. When students repeatedly read frustration-level text, they may develop counterproductive habits.

We can all read more difficult text if the topic is one in which we are highly interested and/or have good background knowledge. For this reason, there is likely not just one reading level that is appropriate for a student. The student's reading level will vary somewhat depending upon the text.

For example, Miss Lopez gives an eighth-grade ORF measure to Jeremy, an eighth-grade boy, and he reads it with 96 percent accuracy. Jeremy is able to read eighth-grade text at an independent level, and this level of text is appropriate for assignments that will be done with little or no teacher or parent support. Miss Lopez gives the same eighth-grade passage to Alicia, another eighth-grade student. Alicia reads the passage with only 92 percent accuracy. The eighth-grade text is on Alicia's instructional reading level, so Miss Lopez can assign eighth-grade text to Alicia if Alicia will receive support or instruction as she reads it. Miss Lopez also asks Alicia to read a seventh-grade passage. Alicia can read this passage with 97 percent accuracy, so her independent reading level is seventh-grade text. Miss Lopez also gives the eighth-grade passage to Michael,

who can read it with only 82 percent accuracy. The eighth-grade text is at Michael's frustration level, and unless Michael is highly interested in the text and is willing to struggle through it with guidance, he should not be asked to read this text. If Michael is regularly required to read eighth-grade text he may display low motivation to read or even behavior problems. Miss Lopez gives Michael the seventh-grade text and finds that it is at his instructional reading level, since he can read it at 90 percent accuracy. Michael reads a sixth-grade text with 97 percent accuracy, indicating that this is his independent reading level.

An easy way to apply this process to any text a student reads is to use the "One-to-Ten Rule": If a student misses more than 1 word for every 10 words read, the text is probably too difficult. So if a student reads 50 words and misses 5, he or she read the text with 90 percent accuracy, indicating instructional reading level. But if the student misses 7 words in the same text, the text is at frustration level for that student. A student can read 10 words and miss 1, read 20 words and miss 2, etc., and still be at the instructional level. Keep in mind, though, that these are rough guidelines. Use your good "teacher judgment" when placing students in text, but be sure to listen to them read orally from time to time to verify that they are able to read most of the words accurately.

As in assessing oral reading fluency, it is helpful to have students read more than one passage to assess their oral reading accuracy levels. The accuracy levels on different passages are then averaged. Sometimes students will struggle on a particular passage because of a name or concept with which they are not familiar, but they are able to read other text at the same level with better accuracy. If oral reading accuracy is determined at the same time as oral reading fluency, giving two to three brief one-minute passages is sufficient to find both students' accuracy and fluency on grade-level text.

### Using the Results of Oral Reading Fluency Assessment

While ORF scores tell whether a student's progress or performance level is acceptable, they do not reveal the source of the problem. Therefore, Miss Lopez may need to conduct more assessments to find out about the student's reading difficulties and to plan appropriate instruction.

After assessing each reader's fluency ability, Miss Lopez examines the results and determines which students have difficulties. She then conducts further assessments of these students to devise an instructional plan for each student. Further assessments usually include measures of word recognition. Remember, if a middle school student's fluency is a little below average, this may not be reason for concern, unless this seems to keep the student from understanding what he or she reads or from finishing work. Students with ORF rates below the 50th percentile should be given additional assessments of word recognition.

## ASSESSING WORD RECOGNITION

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Some systematic decoding programs designed for secondary students include assessments that can be used to evaluate student mastery of the different phonic elements or skills that are being taught in these programs (e.g., the sound of the letter combination *ai*, reading vowel team syllables such as *tain* in the word *maintain*, or reading words with certain prefixes and suffixes). If such assessments are available with an instructional program, they can be used to determine what students know and do not know to guide instruction (diagnostic assessment) and to monitor student progress over time (see below). If no such assessments of word reading are available, the teacher may use a published assessment of **word recognition** or phonics knowledge to determine student needs and track progress in mastering the elements being taught (see Resources section for examples).

Note that not all difficulties with pronunciation are because of poor word recognition skills. Students with limited vocabularies, especially English language learners (ELLs), may recognize a word but not know how to pronounce it. Sometimes ELLs may have trouble pronouncing a word because they have never heard it in English, not necessarily because they do not know what the word means. They may also mispronounce English words that bear a close resemblance to a word they know in their native language (e.g., the English word *literature* and the Spanish word *literatura*). Take care interpreting assessments with these students.

## MONITORING STUDENT PROGRESS OVER TIME

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Throughout the year, Miss Lopez may continue to use oral reading fluency measures to monitor improvement for students with low ORF scores. This can be done by administering passages at the same level of difficulty at regular intervals during the school year. Typically, it is helpful to monitor the progress of students with reading difficulties every 2 weeks. The scores on these assessments can be plotted as a line graph, resulting in a visual representation of a student's rate of progress over time. This can be done only if the assessments conducted throughout the year are all at the same level of difficulty. If students are given more difficult passages to read over the course of the school year, their fluency rates will drop when moved to a higher level, making it impossible to compare their rate of growth during one part of the year to that in another part of the year.

Typically, we monitor students' progress all year long at the goal level, or the level of text we want them to be able to read at the end of the school year. Then we can examine their progress toward that goal. For example, let's say that Miss Lopez has a student named Teresa in the seventh grade who begins the school year able to read sixth-grade-level text at 70 WCPM. Miss Lopez may set a goal that, by the end of the school year, Teresa will be able to read seventh-grade text at 100 WCPM. Thus, Miss Lopez would administer seventh-grade passages to Teresa every two weeks throughout the school year to see how Teresa is progressing toward this goal. These are not the same passages, but different passages that are equally difficult. In order to establish the level of difficulty of oral reading fluency passages, the developers of published assessments do extensive field testing with many students (see Resources section).

Besides monitoring oral reading fluency, Miss Lopez may also want to monitor progress in the other specific reading domains that her instruction is targeting. For example, if a student's instructional focus is at the word recognition level, it will be important for Miss Lopez to monitor progress in this area. Miss Lopez may administer an assessment of word recognition or decoding at regular intervals to evaluate student progress in mastering phonics elements or rapidly identifying words.

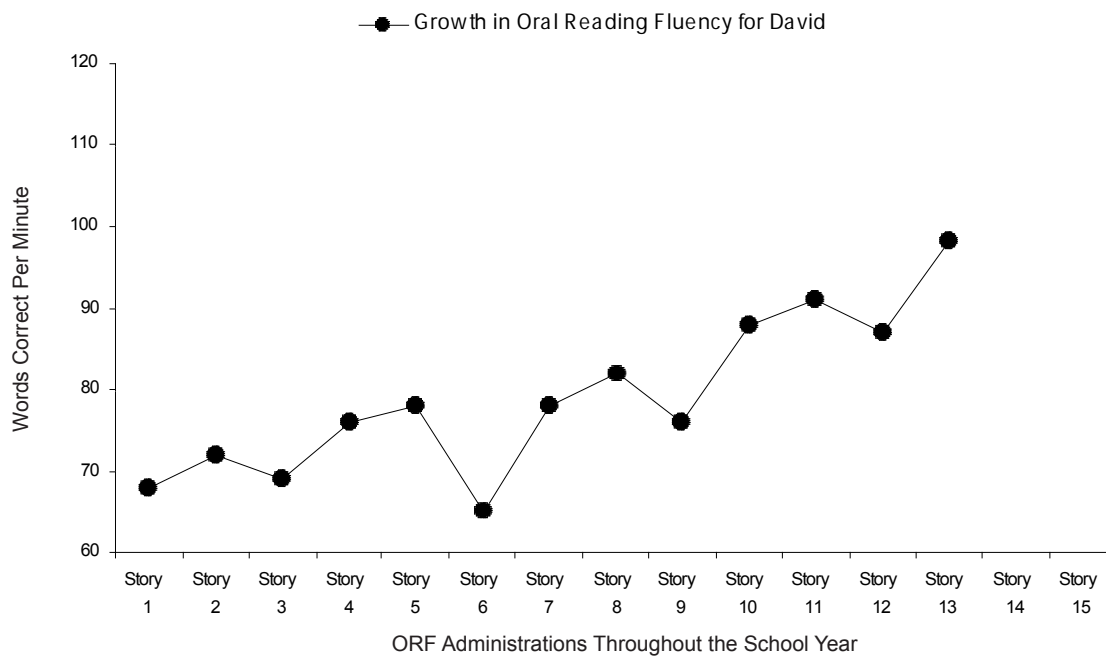
Monitoring progress is essential so that Miss Lopez knows how to adjust instruction and grouping. Typically, if in three data points a student is not making progress, the teacher adjusts instruction in some way.

Having students chart their own progress in fluency can increase motivation and participation (Bos & Vaughn, 2006). A simple format for charting progress is a progress monitoring tracking form (see Figure 8). After generating multiple scores, teachers may also have students plot their fluency scores on a line graph. Figure 9 on the next page shows an example of a progress monitoring graph.

FIGURE 8. PROGRESS MONITORING TRACKING FORM.

Student:				
	9/1	9/2	9/3	9/4
Text Level	5th-grade text	5th-grade text		
Score	80	83		
Errors	7	3		
Accuracy	91% accuracy	97% accuracy		
Reading Level	Instructional level	Independent level		

FIGURE 9. PROGRESS MONITORING GRAPH.



## CAVEATS ABOUT ORAL READING FLUENCY IN MIDDLE SCHOOL STUDENTS

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Many of the guidelines about monitoring students' progress and establishing benchmarks in oral reading fluency for older students with reading difficulties are based on research with younger children in grades 1–4. Considerably less is known about fluency practices for older students. Consider the following when interpreting fluency rates with older students:

- The most important outcome for students is that they can understand and learn from the text they read. If students have below-average fluency but demonstrate average or above-average comprehension, it may not be appropriate to spend considerable time on improving their rate of reading.
- Students who read above 90–100 WCPM with 90 percent accuracy in grade-level text may benefit from time spent on enhancing their background knowledge, vocabulary, and/or comprehension rather than on fluency instruction.
- Consider the individual needs of adolescent learners, their interest in reading, and motivation to learn as you interpret oral reading fluency scores and develop interventions.

## OUTCOME ASSESSMENTS

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After a semester or year is completed, it is helpful to administer outcome assessments to determine whether students have attained instructional goals. Some students may be making so much progress that they will not require additional reading instruction. For students who continue in the reading class, administer diagnostic assessments. These assessments may show that some students whose word reading or fluency skills were previously identified as “still developing” may now be classified as “developed.” Based on these assessments, students would be regrouped and the focus of instruction adjusted.

