

Oral reading fluency norms: A valuable assessment tool for reading teachers

In this article, fluency norms are reassessed and updated in light of the findings stated in the National Reading Panel report.

Teachers have long known that having students learn to process written text fluently, with appropriate rate, accuracy, and expression—making reading sound like language (Stahl & Kuhn, 2002)—is important in the overall development of proficient reading. However, the fundamental link between reading fluency and comprehension, especially in students who struggle with reading, may have been new news to some teachers (Pikulski & Chard, 2005). Following the publication of the National Reading Panel report (National Institute of Child Health and Human Development, 2000), many teachers and reading specialists are now focusing significant attention on developing their students' fluency skills.

Curriculum-based measurement and oral reading fluency

Educators looking for a way to assess students' reading fluency have at times turned to curriculum-based measurement (CBM). CBM is a set of standardized and well-researched procedures for assessing and monitoring students' progress in reading, math, spelling, and writing (Fuchs & Deno, 1991; Shinn, 1989, 1998; Tindal & Marston, 1990). One widely used CBM procedure is the assessment of oral reading fluency (ORF), which focuses on two of the three components of fluency: rate and accuracy. A teacher listens to a student read aloud from an unpracticed passage for one

minute. At the end of the minute each error is subtracted from the total number of words read to calculate the score of words correct per minute (WCPM). For a full description of the standardized CBM procedures for assessing oral reading fluency, see Shinn (1989).

WCPM has been shown, in both theoretical and empirical research, to serve as an accurate and powerful indicator of overall reading competence, especially in its strong correlation with comprehension. The validity and reliability of these two measures have been well established in a body of research extending over the past 25 years (Fuchs, Fuchs, Hosp, & Jenkins, 2001; Shinn, 1998). The relationship between ORF and comprehension has been found to be stronger with elementary and junior high students than with older individuals (Fuchs et al., 2001).

National norms for oral reading fluency performance

National ORF norms: 1992

In 1992 we published an article that contained a table of ORF norms that reported percentile scores for students in grades 2–5 at three times (fall, winter, and spring) for each grade. These performance norms were created by compiling data from eight geographically and demographically diverse school districts in the United States. These districts all had used standardized CBM procedures to collect their ORF data. There were several limitations to the original 1992 ORF norms. For example, they contained scores only for grades 2–5. In addition, the data obtained in that original study

allowed us to compile norms only for the 75th, 50th, and 25th percentiles.

Time to revisit national ORF norms

Over a decade later, the interest in fluency by teachers and administrators has grown tremendously. By 2005, fluency had made it to both the “what’s hot” and the “what should be hot” categories of the annual survey of national reading experts to determine current key issues (Cassidy & Cassidy, 2004/2005). Materials designed specifically to help teachers teach reading fluency have been developed such as *Read Naturally* (Ihnot, 1991), *QuickReads* (Hiebert, 2002), and *The Six-Minute Solution* (Adams & Brown, 2003). Publications designed to help teachers understand what fluency is and how to teach it (see Osborn & Lehr, 2004), as well as how to assess reading fluency (see Rasinski, 2004), are now readily available. Articles about reading fluency frequently appear in major professional reading journals, including *The Reading Teacher*. Recent examples are Hudson, Lane, and Pullen (2005); Kuhn (2004/2005); and Pikulski and Chard (2005).

From kindergarten through grade 3 a common practice has been to compare fluency scores with established norms or benchmarks for (a) screening students to determine if an individual student may need targeted reading assistance, and (b) monitoring students’ reading progress. Examples of benchmark assessments include DIBELS (Good & Kaminski, 2002), AIMSweb (Edformation, 2004), the Texas Primary Reading Inventory—TPRI (Texas Education Agency, 2004), and the Reading Fluency Monitor (*Read Naturally*, 2002). With escalating interest in assessing and teaching reading fluency in the past decade, professional educators must be certain that they have the most current and accurate information available to them.

National ORF norms: 2005

New national performance norms for oral reading fluency have now been developed. These new ORF norms were created from a far larger number of scores, ranging from a low of 3,496 (in the winter assessment period for eighth graders) to a high of 20,128 scores (in the spring assessment of second graders). We collected data from schools and districts in 23 states and were able to compile more

detailed norms, reporting percentiles from the 90th through the 10th percentile levels. To ensure that these new norms represented reasonably current student performance, we used only ORF data collected between the fall of 2000 through the 2004 school year.

All the ORF data used in this current compilation were collected using traditional CBM procedures that mandate that every student in a classroom—or a representative sample of students from all levels of achievement—be assessed. Following these procedures, reading scores were collected from the full range of students, from those identified as gifted or otherwise exceptionally skillful to those diagnosed with reading disabilities such as dyslexia. Students learning to speak English who receive reading instruction in a regular classroom also have been represented in this sample, although the exact proportion of these students is unknown. (A complete summary of the data files used to compile the norms table in this article is available at the website of Behavioral Research & Teaching at the University of Oregon: http://brt.uoregon.edu/techreports/TR_33_NCORF_DescStats.pdf [Behavioral Research and Teaching, 2005].)

Using ORF norms for making key decisions

Everyone associated with schools today is aware of the increasing requirements for data-driven accountability for student performance. The federal No Child Left Behind (NCLB) Act of 2001 (NCLB, 2002) mandates that U.S. schools demonstrate Adequate Yearly Progress (AYP). In turn, state and local education agencies are requiring schools to demonstrate that individual students are meeting specified benchmarks indicated in state standards. This amplified focus on accountability necessarily requires increased collection of assessment data, in both special and general education settings (Linn, 2000; McLaughlin & Thurlow, 2003).

Four categories of reading assessments

Reading assessments have recently been categorized to match four different decision-making

purposes: screening, diagnostic, progress monitoring, and outcome (Kame'enui, 2002).

- *Screening measures*: Brief assessments that focus on critical reading skills that predict future reading growth and development, conducted at the beginning of the school year to identify children likely to need extra or alternative forms of instruction.
- *Diagnostic measures*: Assessments conducted at any time during the school year when a more in-depth analysis of a student's strengths and needs is necessary to guide instructional decisions.
- *Progress-monitoring measures*: Assessments conducted at a minimum of three times a year or on a routine basis (e.g., weekly, monthly, or quarterly) using comparable and multiple test forms to (a) estimate rates of reading improvement, (b) identify students who are not demonstrating adequate progress and may require additional or different forms of instruction, and (c) evaluate the effectiveness of different forms of instruction for struggling readers and provide direction for developing more effective instructional programs for those challenged learners.
- *Outcome measures*: Assessments for the purpose of determining whether students achieved grade-level performance or demonstrated improvement.

The role of ORF in reading assessment

Fuchs et al. (2001) have suggested that ORF assessments can play a role in screening and progress monitoring. Some initial research by Hosp and Fuchs (2005) also provides support for the use of traditional CBM measures as a way of diagnosing difficulties in reading subskills. Having current norms available can help guide teachers in using ORF assessment results to make key instructional decisions for screening, diagnosis, and progress monitoring.

The ORF norms presented in Table 1 provide scores for students in grades 1–8 for three different time periods across a school year. For each grade level, scores are presented for five different percentile rankings: 90th, 75th, 50th, 25th, and 10th. In order to use these norms for making in-

structional or placement decisions about their own students, teachers must be certain to follow the CBM procedures carefully to collect ORF scores.

ORF norms for screening decisions

Rationale and support for screening reading

Screening measures help a teacher quickly identify which students are likely “on track” to achieve future success in overall reading competence and which ones may need extra assistance. Screening measures are commonly developed from research examining the capacity of an assessment to predict future, complex performance based on a current, simple measure of performance. These assessments are designed to be time efficient to minimize the impact on instructional time. Research has clearly indicated the critical need to provide high-quality, intensive instructional interventions to students at risk for reading difficulty as soon as possible (Snow, Burns, & Griffin, 1998). Increasingly, teachers are being required to administer screening measures to every student, especially those in kindergarten through grade 3, because of the potential to prevent future reading difficulties by early identification and through instructional intervention.

Assessments that measure a student's accuracy and speed in performing a skill have long been studied by researchers. Such fluency-based assessments have been proven to be efficient, reliable, and valid indicators of reading proficiency when used as screening measures (Fuchs et al., 2001; Good, Simmons, & Kame'enui, 2001). Researchers have cited a variety of studies that have documented the ability of these simple and quick measures to accurately identify individual differences in overall reading competence.

Concerns about fluency measures as screening tools

Some educators have expressed apprehension about the use of a very short measure of what may appear as a single, isolated reading skill to make a determination about a student's proficiency in the highly complex set of processes involved in the task of reading (Hamilton & Shinn, 2003). Although this concern is understandable, it is important to

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

recognize that when fluency-based reading measures are used for screening decisions, the results are not meant to provide a full profile of a student's overall reading skill level. These measures serve as a powerful gauge of proficiency, strongly supported by a convergence of findings from decades of theoretical and empirical research (Fuchs et al., 2001; Hosp & Fuchs, 2005). The result of any screening measure must be viewed as one single piece of valuable information to be considered when making important decisions about a student, such as placement in an instructional program or possible referral for academic assistance.

ORF as a "thermometer"

Perhaps a helpful way to explain how teachers can use a student's WCPM score as a screening tool would be to provide an analogy. A fluency-based screener can be viewed as similar to the temperature reading that a physician obtains from a thermometer when assisting a patient. A thermometer—like a fluency-based measure—is recognized as a tool that provides valid (relevant, useful, and important) and reliable (accurate) information very quickly. However, as important as a temperature reading is to a physician, it is only a single indicator of general health or illness.

A temperature of 98.6 degrees would not result in your physician pronouncing you "well" if you have torn a ligament or have recurring headaches. On the other hand, if the thermometer reads 103 degrees, the physician is not going to rush you to surgery to have your gall bladder removed. Body temperature provides an efficient and accurate way for a doctor to gauge a patient's overall health, but it cannot fully diagnose the cause of the concern. Fluency-based screening measures can be valuable tools for teachers to use in the same way that a physician uses a thermometer—as one reasonably dependable indicator of student's academic "health" or "illness."

No assessment is perfect, and screening measures may well exemplify the type of measures sometimes referred to by education professionals as "quick and dirty." Screening measures are designed to be administered in a short period of time ("quick"), and will at times over- or underidentify students as needing assistance ("dirty"). While WCPM has been found to be a stable performance score, some variance can be expected due to

several uncontrollable factors. These consist of a student's familiarity or interest in the content of the passages, a lack of precision in the timing of the passage, or mistakes made in calculating the final score due to unnoticed student errors. Both human error and measurement error are involved in every assessment. Scores from fluency-based screening measures must be considered as a performance indicator rather than a definitive cut point (Francis et al., 2005).

Using ORF norms for screening decisions

Having students read for one minute in an unpracticed *grade-level* passage yields a rate and accuracy score that can be compared to the new ORF norms. This method of screening is typically used no earlier than the middle of first grade, as students' ability to read text is often not adequately developed until that time. Other fluency-based screening measures have been created for younger students who are still developing text-reading skills (Edformation, 2004; Kaminski & Good, 1998; Read Naturally, 2002). The ORF norms presented in this article start in the winter of first grade and extend up to the spring of eighth grade.

Interpreting screening scores using the ORF norms: Grade 1. Research by Good, Simmons, Kame'enui, Kaminski, & Wallin (2002) found that first-grade students who are reading 40 or more WCPM on unpracticed text passages are by the end of the year at low risk of future reading difficulty, while students below 40 WCPM are at some risk, and students reading below 20 WCPM are at high risk of failure. We recommend following these guidelines for interpreting first-grade scores.

Interpreting screening scores using the ORF norms: Grades 2–8. To determine if a student may be having difficulties with reading, the teacher compares the student's WCPM score to the scores from that student's grade level at the closest time period: fall, winter, or spring. On the basis of our field experiences with interpreting ORF screening scores, we recommend that a score falling within 10 words above or below the 50th percentile should be interpreted as within the normal, expected, and appropriate range for a student at that grade level at that time of year, at least for students in grades 2–8.

ORF norms for diagnosis

We can continue the medical analogy used previously with screening decisions to discuss diagnosing reading difficulties. When a physician sees a patient with an elevated body temperature, that information—along with blood pressure, cholesterol levels, height/weight ratio, and many other potential sources of data—serves as a key part of the physician’s decision about the next steps to take in the patient’s treatment. Diagnosing illness has direct parallels to diagnosing the causes for reading difficulties and planning appropriate instruction.

As we have discussed, if a student has a low score on a screening measure, that single score alone cannot provide the guidance we need about how to develop an instructional plan to help that student achieve academic “wellness.” A professional educator looks beyond a low score on a fluency-based screening measure to examine other critical components of reading, including oral language development, phonological and phonemic awareness, phonics and decoding skills, vocabulary knowledge and language development, comprehension strategies, and reading fluency. The ORF norms can play a useful role in diagnosing possible problems that are primarily related to fluency.

Interpreting scores using the ORF norms for diagnosing fluency problems

The procedures for using the ORF norms to diagnose fluency problems are similar to those for screening, except here the level of materials should reflect the student’s *instructional* reading level, rather than his or her *grade* level. We define instructional level as text that is challenging but manageable for the reader, with no more than approximately 1 in 10 difficult words. This translates into 90% success (Partnership for Reading, 2001).

A tool sometimes used by reading specialists or classroom teachers for diagnosing reading problems is an informal reading inventory (IRI). IRIs are either teacher-made or published sets of graded passages, sometimes with introductions to be read aloud to students before they read, and typically include a set of comprehension questions to be answered after the student reads the entire passage. IRIs are commonly used to help a teacher determine at what level a student can read text either independently or with instruction, or if the text is at that student’s frus-

tration level (less than 90% accuracy with impaired comprehension). Analysis of miscues made during the student’s reading can assist in the diagnoses of decoding or comprehension difficulties. IRI passages can also be used along with CBM procedures to assist in diagnosing fluency problems.

To incorporate fluency diagnosis into an IRI assessment, a teacher would assess a student’s fluency using the standardized CBM procedures during the first 60 seconds of reading in text that is determined to be at the student’s *instructional* reading level.

ORF norms for monitoring student progress

A third use for ORF norms is to provide a tool to monitor a student’s progress in reading. Use of CBM procedures to assess individual progress in acquiring reading skills has a long history and strong support from numerous empirical research studies (Fuchs et al., 2001; Fuchs & Fuchs, 1998; Shinn, 1989, 1998). CBM fluency-based measures have been found by many educators to be better tools for making decisions about student progress than traditional standardized measures, which can be time-consuming, expensive, administered infrequently, and of limited instructional utility (Good, Simmons, & Kame’enui, 2001; Tindal & Marston, 1990).

Using ORF norms for progress-monitoring decisions

CBM progress monitoring typically involves having a student read an unpracticed passage selected from materials at that student’s grade level (for those reading at or above expected levels) or at a goal level (for students reading below expected levels). Progress-monitoring assessments may be administered weekly, once or twice monthly, or three to four times per year, depending on the type of instructional program a student is receiving.

Students at or above grade level in reading. Students whose reading performance is at or exceeds the level expected for their grade placement may need only to have their reading progress monitored a few times per year to determine if they are meeting the benchmark standards that serve as

predictors of reading success. For these students, progress monitoring may take the form of simply repeating the same procedures used in the fall for screening. Students read aloud from an unpracticed passage at their grade level, and the resulting WCPM score is compared to the ORF norms for the most appropriate comparison time period—fall, winter, or spring. If a student's WCPM score is within plus or minus 10 WCPM of the 50th percentile on the ORF table, or is more than 10 WCPM above the 50th percentile, we recommend that the student be considered as making adequate progress in reading (unless there are other indicators that would raise concern).

Students below grade level in reading. For students who receive supplemental support for their reading (those reading six months to one year below grade level) or students with more serious reading problems who are getting more intensive interventions to improve their reading skills, progress monitoring may take a different form. For these students, progress-monitoring assessments may be administered more frequently, perhaps once or twice monthly for students receiving supplemental reading support, and as often as once per week for students reading more than one year below level who are receiving intensive intervention services, including special education.

Using graphs to interpret progress-monitoring scores

When monitoring the progress of these lower performing students, the standard CBM procedures are used; however, the student's WCPM scores are recorded on a graph to facilitate interpretation of the scores. An individual progress-monitoring graph is created for each student. A graph may reflect a particular period of time, perhaps a grading period or a trimester. An aimline is placed on the graph, which represents the progress a student will need to make to achieve a preset fluency goal. Each time the student is assessed, that score is placed on the graph. If three or more consecutive scores fall below the aimline, the teacher must consider making some kind of adjustment to the current instructional program (Hasbrouck, Woldbeck, Ihnot, & Parker, 1999).

CBM progress-monitoring procedures have been available for many years but have not been

widely used by teachers (Hasbrouck et al., 1999). With the increased awareness of the importance of preventing reading difficulties and providing intensive intervention as soon as a concern is noted, this will likely change. Using fluency norms to set appropriate goals for student improvement and to measure progress toward those goals is a powerful and efficient way for educators to make well-informed and timely decisions about the instructional needs of their students, particularly the lowest performing, struggling readers. (For more resources for progress monitoring, see the website of the National Center on Student Progress Monitoring at www.studentprogress.org.)

A cautionary note about reading fluency

We would like to add one caveat regarding reading fluency. Although this skill has recently become an increased focus in classroom reading instruction, and the awareness of the link between fluency and comprehension has grown, there appears to be a tendency among some educators to believe that raising a student's fluency score is "the" main goal of reading instruction. As important as fluency is, and as valuable as the information obtained from fluency-based assessments can be for instructional decision making, we caution teachers and administrators to keep fluency and fluency-based assessment scores in perspective. Helping our students become fluent readers is absolutely critical for proficient and motivated reading. Nonetheless, fluency is only one of the essential skills involved in reading. We suggest that teachers use the 50th percentile as a reasonable gauge of proficiency for students. Keep in mind that it is appropriate and expected for students to adjust their rate when reading text of varying difficulty and for varied purposes. Pushing every student to reach the 90th percentile or even the 75th percentile in their grade level is not a reasonable or appropriate goal for fluency instruction.

Focus on fluency

Reading is a complex process involving multiple linguistic and cognitive challenges. It is clear

that the ability to read text effortlessly, quickly, accurately, and with expression plays an essential role in becoming a competent reader. Researchers still have much work to do to identify fully the features, mechanisms, and processes involved in reading fluency. However, decades of research have validated the use of fluency-based measures for making essential decisions about which students may need assistance in becoming a skilled reader (screening), an individual student's strength or need with the skills of reading fluency (diagnosis), and whether a student is making adequate progress toward the goals of improved reading proficiency (progress monitoring). While we strongly agree with the premise that accuracy, rate, and quality of oral reading must be assessed within a context of comprehension (Pikulski & Chard, 2005), up-to-date national oral reading fluency norms can serve as an important tool to assist educators in developing, implementing, and evaluating effective instructional programs to help every student become a skilled, lifelong reader and learner.

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References

- Adams, G.N., & Brown, S. (2003). *The six-minute solution*. Longmont, CO: Sopris West.
- Behavioral Research and Teaching. (2005). *Oral reading fluency: 90 years of assessment* (Tech. Rep. No. 33). Eugene: University of Oregon.
- Cassidy, J., & Cassidy, D. (December 2004/January 2005). What's hot, what's not for 2005. *Reading Today*, p. 1.
- Edformation. (2004). AIMSweb progress monitoring and assessment system. Retrieved May 17, 2004, from <http://www.edformation.com>
- Francis, D.J., Fletcher, J.M., Stuebing, K.K., Lyon, G.R., Shaywitz, B.A., & Shaywitz, S.E. (2005). Psychometric approaches to the identification of LD: IQ and achievement scores are not sufficient. *Journal of Intellectual Disabilities*, 38(2), 98-108.
- Fuchs, L.S., & Deno, S.L. (1991). Curriculum-based measurement: Current applications and future directions. *Exceptional Children*, 57, 466-501.
- Fuchs, L.S., & Fuchs, D. (1998). Monitoring student progress toward the development of reading competence: A review of three forms of classroom-based assessment. *School Psychology Review*, 28, 659-671.
- Fuchs, L.S., Fuchs, D., Hosp, M.K., & Jenkins, J.R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5, 239-256.
- Good, R.H., III, & Kaminski, R.A. (Eds.). (2002). *Dynamic indicators of basic early literacy skills* (6th ed.). Eugene: University of Oregon, Institute for the Development of Educational Achievement.
- Good, R.H., Simmons, D.C., & Kame'enui, E.J. (2001). The importance and decision-making utility of a continuum of fluency-based indicators of foundational reading skills for third-grade high-stakes outcomes. *Scientific Studies of Reading*, 5, 257-288.
- Good, R.H., Simmons, D.S., Kame'enui, E.J., Kaminski, R.A., & Wallin, J. (2002). *Summary of decision rules for intensive, strategic, and benchmark instructional recommendations in kindergarten through third grade* (Tech. Rep. No. 11). Eugene: University of Oregon.
- Hamilton, C., & Shinn, M.R. (2003). Characteristics of word callers: An investigation of the accuracy of teachers' judgments of reading comprehension and oral reading skills. *School Psychology Review*, 32, 228-240.
- Hasbrouck, J.E., & Tindal, G. (1992). Curriculum-based oral reading fluency norms for students in grades 2-5. *Teaching Exceptional Children*, 24(3), 41-44.
- Hasbrouck, J.E., Woldbeck, T., Ihnot, C., & Parker, R.I. (1999). One teacher's use of curriculum-based measurement: A changed opinion. *Learning Disabilities Research & Practice*, 14(2), 118-126.
- Hiebert, E.H. (2002). *QuickReads*. Upper Saddle River, NJ: Modern Curriculum Press.
- Hosp, M.K., & Fuchs, L.S. (2005). Using CBM as an indicator of decoding, word reading, and comprehension: Do the relations change with grade? *School Psychology Review*, 34 9-26.
- Hudson, R.F., Lane, H.B., & Pullen, P.C. (2005). Reading fluency assessment and instruction: What, why, and how? *The Reading Teacher*, 58, 702-714.
- Ihnot, C. (1991). *Read naturally*. Minneapolis, MN: Read Naturally.
- Kame'enui, E.J. (2002, May). *Final report on the analysis of reading assessment instruments for K-3*. Eugene: University of Oregon, Institute for the Development of Educational Achievement.
- Kaminski, R.A., & Good, R.H. (1998). Assessing early literacy skills in a problem-solving model: Dynamic Indicators of Basic Early Literacy Skills. In M.R. Shinn (Ed.), *Advanced applications of curriculum-based measurement* (pp. 113-142). New York: Guilford.
- Kuhn, M. (2004/2005). Helping students become accurate, expressive readers: Fluency instruction for small groups. *The Reading Teacher*, 58, 338-345.
- Linn, R.L. (2000). Assessments and accountability. *Educational Researcher*, 29(2), 4-16.
- McLaughlin, M.J., & Thurlow, M. (2003). Educational accountability and students with disabilities: Issues and challenges. *Educational Policy*, 17, 431-451.

- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).
- Osborn, J., & Lehr, F. (2004). *A focus on fluency*. Honolulu, HI: Pacific Resources for Education and Learning.
- Partnership for Reading. (2001). *Put reading first: The research building blocks for teaching children to read*. Washington, DC: National Institute for Literacy.
- Pikulski, J.J., & Chard, D.J. (2005). Fluency: Bridge between decoding and comprehension. *The Reading Teacher*, 58, 510-519.
- Rasinski, T.V. (2004) *Assessing reading fluency*. Honolulu, HI: Pacific Resources for Education and Learning.
- Read Naturally. (2002). *Reading fluency monitor*. Minneapolis: Author.
- Shinn, M.R. (Ed.). (1989). *Curriculum-based measurement: Assessing special children*. New York: Guilford.
- Shinn, M.R. (Ed.). (1998). *Advanced applications of curriculum-based measurement*. New York: Guilford.
- Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Stahl, S.A., & Kuhn, M.R. (2002). Making it sound like language: Developing fluency. *The Reading Teacher*, 55, 582-584.
- Texas Education Agency. (2004). *Texas primary reading inventory-TPRI*. Retrieved May 19, 2005, from <http://www.tpri.org>
- Tindal, G., & Marston, D. (1990). *Classroom-based assessment: Testing for teachers*. Columbus, OH: Merrill.