# *from* **Using CBM-Reading Assessments to Monitor Progress**

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…How to Monitor Progress in Reading

How do teachers know whether their students are improving satisfactorily in reading achievement? The most common means of monitoring progress is to carefully observe students’ performance during reading instruction. As they instruct, teachers ask themselves questions. Are students demonstrating growth during the lesson? Are they mastering particular letter-sound correspondences? Are they accurate and fluent in sounding out new words? Can they read word lists accurately and swiftly? Do they read text smoothly? Do some students struggle with some aspects of the lesson? Which parts? Much can be learned by carefully observing students’ performance during reading lessons; however, it is more informative to actually measure reading performance. It is a lot like tracking weight gain. Recording the calories consumed is not as informative as climbing on the scale every day or two. The trick is finding a suitable reading achievement measure that can be given repeatedly to measure student progress.

**Norm referenced reading achievement tests will not suffice because they cannot be given repeatedly throughout the year; they require too much time to administer (taking time from instruction); they are not sensitive to reading gains over intervals of a few weeks; and, rather than measuring reading growth, they merely compare an individual’s performance to a peer group. By contrast, Curriculum-Based Measures in Reading (CBM-R; Deno, 1985) can be given frequently, take little time to administer, are sensitive to reading growth, and are well correlated with reading comprehension tests. CBM-R uses the number of words read correctly (WRC) to paint a picture of a student’s overall reading proficiency.**

Because reading aloud is such a complex endeavor requiring coordination among several cognitive processes, it serves as an index of the student’s general reading achievement and is extremely useful for monitoring a student’s response to instruction (Fuchs, Fuchs, Hosp, & Jenkins, 2001). Just like a person’s body temperature is one way to measure his or her general health, CBM-R can indicate whether students are progressing satisfactorily or if a problem needs to be addressed. …

## Conclusion

CBM-R gives the clearest picture of students’ ongoing reading growth. It is a measure that adds significantly to the insights teachers glean from observing student performance during reading lessons. It indicates how well students are responding to current instruction, when to change instruction, and if changes have worked. Research (Fuchs, Deno, & Mirkin, 1984) shows that students with reading disabilities make stronger reading gains when teachers use CBM-R. It helps us amend instruction until it is effective.

## References

Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. Exceptional Children, 52, 219–232.

Deno, S. L., Fuchs, L. S., Marston, D., & Shin, J. (2001). School Psychology Review, 30, 507–524.

Fuchs, D. F., Compton, D. L., Fuchs, L. S., & Bryant, J. D. (2006, February). The Prevention and Identification of Reading Disability. Paper presented at the Pacific Coast Research Conference. San Diego: CA.

Fuchs, L. S., Deno, S. L., & Mirkin, P. K. (1984). The effects of frequent curriculum-based measurement and evaluation on pedagogy, student achievement, and student awareness of learning. American Educational Research Journal, 21, 449–460.

Fuchs, L. S., Fuchs, D. F., 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.

Jenkins, J. R., Graff, J. J., & Miglioretti, D. L. (2006, February). How Often Must We Measure to Estimate Oral Reading Growth? Paper presented at the Pacific Coast Research Conference. San Diego: CA.

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Common Progress-Monitoring Measures

…CBM, one approach to progress monitoring, has the most well supported measures in the research base. According to Fuchs and Fuchs (2006),

*More than 200 empirical studies published in peer-review journals (a) provide evidence of CBM's reliability and validity for assessing the development of competence in reading, spelling, and mathematics and (b) document CBM's capacity to help teachers improve student outcomes at the elementary grades (p. 1).*

CBM is a form of classroom assessment that 1) describes academic competence in reading, spelling, and mathematics; 2) tracks academic development; and 3) improves student achievement (Fuchs & Stecker, 2003). It can be used to determine the effectiveness of the instruction for all students and to enhance educational programs for students who are struggling (McMaster & Wagner, 2007). Finally, findings of over 200 empirical studies indicate that CBM produces accurate, meaningful information about students’ academic levels and growth, is sensitive to student improvement, and when teachers use CBM to inform their instructional decisions, students achieve better (Fuchs & Fuchs, 2006).

Fuchs and Stecker (2003) warn that most classroom assessment is based on mastery of a series of short-term instructional objectives or "mastery measurement." To implement this type of assessment the teacher determines the educational sequence for the school year and designs criterion-referenced tests to match each step in that educational sequence. According to Fuchs and Stecker, problems with mastery measurement include: 1) the hierarchy of skills is logical, not empirical; 2) assessment does not reflect maintenance or generalization; 3) measurement methods are designed by teachers, with unknown reliability and validity; and 4) the measurement framework is highly associated with a set of instructional methods. CBM combats these problems by making no assumptions about instructional hierarchy for measurement, so it fits with any instructional approach and by incorporating automatic tests of retention and generalization. According to Fuchs and Fuchs (2006), CBM and mastery measurement have another significant difference:

*CBM also differs from mastery measurement because it is standardized; that is, the progress monitoring procedures for creating tests, for administering and scoring those tests, and for summarizing and interpreting the resulting database are prescribed. By relying on standardized methods and by sampling the annual curriculum on every test, CBM produces a broad range of scores across individuals of the same age. The rank ordering of students on CBM corresponds with rank orderings on other important criteria of student competence. For example, students who score high (or low) on CBM are the same students who score high (or low) on the annual state tests. For these reasons, CBM demonstrates strong reliability and validity. At the same time, because each CBM test assesses the many skills embedded in the annual curriculum, CBM yields descriptions of students' strengths and weaknesses on each of the many skills contained in the curriculum. These skills profiles also demonstrate reliability and validity (p. 2).*

…Conclusion and Directions for Future Research

Progress monitoring is paramount in determining if students are benefitting appropriately from the typical instructional program, identifying students who are not making adequate progress and guiding the construction of effective intervention programs for students who are not profiting from typical instruction. However, it is important to note that while CBM and other measures can be helpful tools for monitoring progress; there are some potential challenges to successful implementation. **Teachers must be trained to use these assessments effectively, as well as to use the data to quantify rates of progress and, subsequently, adjust the educational program for struggling students (Fuchs, Fuchs, & Zumeta, 2008). Without that training, the usefulness of any progress monitoring-measure is greatly limited. It is crucial that schools and districts support data-driven approaches and make training available to all teachers.**

References
Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From identification to intervention*. New York: The Guilford Press.
Fuchs, D., Compton, D. L., Fuchs, L. S., & Bryant, J. (2008). Making "secondary intervention" work in a three-tier responsiveness-to-intervention model: Findings from the first-grade longitudinal reading study at the National Research Center on Learning Disabilities. *Reading and Writing: An Interdisciplinary Journal, 21*, 413–436.
Fuchs, D., & Fuchs, L. S. (2005). Responsiveness-to-intervention: A blueprint for practitioners, policymakers, and parents. *Teaching Exceptional Children, 38*, 57–61.
Fuchs, D., & Fuchs, L. S. (2006). Introduction to responsiveness-to-intervention: What, why, and how valid is it? *Reading Research Quarterly, 4*, 93–99.
Fuchs, L. S., & Fuchs, D. (2008). The role of assessment within the RTI framework. In D. Fuchs, L. S. Fuchs, & S. Vaughn (Eds.), *Response to intervention: A framework for reading educators* (pp. 27–49). Newark, DE: International Reading Association.
Fuchs, L. S., & Stecker, P. M. (2003). [Scientifically based progress monitoring](http://www.studentprogress.org/library/Presentations/ScientificallyBasedProgressMonitoring.pdf). National Center on Student Progress Monitoring: Washington, DC. Retrieved May 15, 2009.
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. S*cientific Studies of Reading, 5*, 257–288.
McMaster, K. L., & Wagner, D. (2007). Monitoring response to general education instruction. In S. R. Jimerson, M. K. Burns, & A. M. VanDerHeyden (Eds.). *Handbook of response to intervention: The science and practice of assessment and intervention* (pp. 223–233). New York: Springer.
Torgesen, J. K., Alexander, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities, 34*, 33–58.
Torgesen, J. K., Wagner, R. K., Rashotte, C. A., Rose, E., Lindamood, P., & Conway, T. (1999). Preventing reading failure in young children with phonological processing disabilities: Group and individual responses to instruction. Journal *of Educational Psychology, 91*, 579–593.
Vaughn, S., Linan-Thompson, S., & Hickman, P. (2003). Response to instruction as a means of identifying students with reading/learning disabilities. *Exceptional Children, 69*, 391–409.
Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Woodcock-Johnson III*. Itasca, IL: Riverside Publishing.