Speed does matter Reading rate can be a tool for in reading

Reading rate can be a tool for assessing students' performance. Authentic instructional activities can then be woven into the reading program.

s a director of a university diagnostic reading clinic, I see children of all ages who, for one reason or another, are making poor progress in learning to read. Our job in the reading clinic is to determine the nature and source of the child's reading problem and suggest (and implement) instructional interventions for helping the child improve. Often the children we see in our clinic demonstrate remarkable strengths. Many have excellent vocabularies; they know the meanings of many words. Others manage to read with few errors in word recognition. Still others often demonstrate high levels of comprehension, even when their oral reading of a passage is marked by a large number of uncorrected word recognition errors. One of the most common manifestations of reading problems in the children we see, however, is slow, disfluent, or what we have come to call inefficient reading. Even when these children have adequate comprehension of a passage, their reading is often characterized by slow, labored, inexpressive, and unenthusiastic rendering of a passage.

Wondering if this manifestation of slow reading among struggling readers is present in readers other than those seen in our reading clinic, my colleague Nancy Padak and I examined all the children in Grades 2 through 5 referred for Title I reading services by their teachers in the Akron, Ohio public schools—over 600 students (Rasinski & Padak, 1998). We asked these children to read a passage at their assigned grade level and one below their grade placement using standard informal reading inventory procedures. What we found surprised us.

The informal reading inventory criteria showed that students' comprehension and word recognition were, on average, at their frustration level-but they were near the threshold for instructional-level reading. In other words, comprehension and word recognition were poor, but it wouldn't take much improvement to move their performance to an instructional level. Reading rate, however, was a different story. When reading passages at their grade level, these students, who their teachers identified as struggling readers, read at a rate that was approximately 60% of their instructional level reading rate; for a passage below their grade level the rate was 50% (Rasinski, 1999). Clearly reading rate, or speed, was a significant factor in classroom teachers' perceptions of their students' proficiency or lack of proficiency in reading.

Excessively slow, disfluent reading leads to less overall reading

It is interesting and, to me, somewhat ironic that slow and labored reading rate may be a reason teachers see fit to recommend certain of their students for supplementary reading services such as Title I. Often when I speak with teachers about reading fluency I mention that reading rate may be an indicator of fluent or disfluent reading. This frequently results in concern expressed by some in the audience that reading rate or reading speed should not be considered a significant factor in reading. This concern is



often expressed in a comment like this: "As long as students understand what they read, as long as they are making meaning out of the text, reading rate should not matter." While I certainly and absolutely agree that understanding what is read is the end game for reading, reading rate, or speed, cannot be ignored either as an indicator of reading fluency or, more precisely, as evidence of excessively slow processing of text. The simple fact that slow reading requires readers to invest considerably greater amounts of time in the reading task than classmates who are reading at a rate appropriate for their grade level should be a major cause for concern for all teachers.

Most of us would agree that reading progress is determined to a large extent by the amount of reading one does (Anderson, Wilson, & Fielding, 1988; Postlethwaite & Ross, 1992). Slow readers, however, by definition, read fewer words per given amount of time than readers who read at more normal rates. Thus, just to keep up with their classmates in the amount of reading done, these slower readers have to invest considerably more time and energy in their reading.

Indeed, data from the 1992 National Assessment of Educational Progress (NAEP) (Pinnell et al., 1995) demonstrate a relationship between reading rate and fluency and self-selected reading in and out of school. The most fluent readers tended to be self-motivated, while less fluent readers were less likely to read in class or out of school. While the causal nature of this relationship has not been empirically established, it seems reasonable to assume that fluency in reading leads to greater reading and greater reading leads to gains in fluency-fluency and reading volume are cause and consequence of one another. (See Stanovich, 1985, for a more complete description of this phenomenon he termed the Matthew effect.)

Excessively slow, disfluent reading is associated with poor comprehension

Moreover, for most children, slow reading is associated with poor comprehension and poor overall reading performance. Research dating back over 60 years suggests that faster readers tend to have better comprehension over what is read and tend to be, overall, more proficient readers (Carver, 1990, Pinnell et al., 1995). The

1992 NAEP study found that 15% of all fourth graders (one out of seven) read "no faster than 74 words per minute...a pace at which it would be difficult to keep track of ideas as they are developing within the sentence and across the page" (Pinnell et al., 1995, p. 42). Indeed, the same 1992 NAEP study found that holistic ratings of reading fluency as well as fourth graders' reading rates were associated with overall reading proficiency (Pinnell et al., 1995; White, 1995). Slow, disfluent reading, then, is linked with poor comprehension. This leads to students reading less, which in turn results in their making slower progress in reading than students who read at a more normal rate for their age or grade placement.

Excessively slow reading leads to reading frustration

Even at the classroom instruction level, slow reading has negative consequences. Imagine yourself as a fifth-grade student who is assigned to read a 12-page chapter in a social studies book in school. Imagine also that you are a disfluent or inefficient reader. You read at 58 words per minute (the average reading rate when reading grade level material of fifth graders referred for Title I support, Rasinski & Padak, 1998), or about half the rate of your classmates. You begin reading as best you can. Like most students, you are well aware of what is happening around you. You are about halfway through the passage, and you notice that many of your classmates have finished reading—they are done and you still have six pages to read. What do you do? Do you pretend to have completed the assignment even though you haven't read or comprehended the entire passage? Or, do you continue reading knowing that by doing so you will be broadcasting your lack of reading proficiency and making your classmates wait on you? Neither solution is very palatable, yet the problem is all too common.

Even if an assignment were made for home reading, the 60-minute reading assignment for most students would become 2 hours of reading for you. Checking out of the reading club may be just around the corner. You may become a 9year-old (one out of eight as reported by the NAEP) who claims never or hardly ever to read for fun. And if you don't read, chances are your



progress in reading will continue to decelerate. Clearly, excessively slow and disfluent reading is an indicator of concern.

Helping slow readers

How do we help slow readers? Does slow inefficient reading require putting students into some sort of special regimen or treatment for increasing reading rate? Absolutely not. For most readers, a slow reading rate, one that lacks flow or fluency, suggests that the student is an inefficient reader. Although the student may have some success in decoding words, it is far from a smooth, automatic, and efficient process-the kind that requires little investment of attention or cognitive energy. The slow reader has to devote so much time and attention to decoding that overall reading pace is significantly reduced; moreover, cognitive resources that could have been used for comprehension must be reallocated to word recognition (LaBerge & Samuels, 1974). As a result, comprehension suffers. Slow, disfluent reading may also be associated with a lack of sensitivity to meaningful phrasing and syntax (how words are ordered and organized in sentences within a passage) that also helps the reader construct the meaning of text (Schreiber, 1980).

Improving students' word recognition efficiency and helping readers develop greater sensitivity to the syntactic nature of the text will result in more efficient reading and improved reading rate or fluency. But again, this does not have to be achieved through isolated skills practice or boring drills. Reading rate, efficiency, or fluency can be developed through instructional activities such as repeated readings, especially authentic ways, such as practicing poetry or scripts for later performance, and supported reading when it is done in activities where the reader reads an authentic text but is supported by a more fluent partner.

One key to nurturing fluent reading is finding the appropriate text for the reader to read. Texts that are too difficult, overly dense with unfamiliar vocabulary and concepts, can make any otherwise fluent reader disfluent (if you don't believe this, try reading aloud an unfamiliar legal document or a selection from a textbook on nuclear physics). Thus, it is important that we find texts that are well within the reader's independent-instructional range in order to promote fluency. Short, highly predictable selections that are meant to be read aloud and with expression, such as rhyming poetry, are ideal for reading fluency instruction.

Poetry and reading fluency are an excellent match in nearly any classroom and for all students. Integrating poetry into the reading curriculum is a great way to promote fluent reading through repeated reading of readable and intriguing texts. However, despite the wonderful potential of poetry to explore language, it is one of the most often neglected components of the language arts curriculum (Denman, 1988; Perfect, 1999). Turning poetry into a performance, which it is meant to be (Graves, 1992; Perfect, 1999), and turning away from too much critical analysis, can give poetry its rightful place in the reading-language arts curriculum. Moreover, when poetry performance is fostered in the classroom, reading fluency is also nurtured as students attempt to make their oral interpretations just right-and this means repeated readings, but in a very natural and purposeful way.

In some classrooms I have visited, teachers simply select a day for a poetry party. Several days prior to the event, students select a poem to learn from one of the poetry books and anthologies in the teacher's personal collection or from a library, or they compose their own poem. Over the next several days students practice reading their poems, usually from a variety of perspectives, in preparation for the poetry party.

When the poetry party day finally arrives, the overhead lights in the classroom are dimmed, a lamp on the teacher's desk is turned on, hot apple cider and popcorn are served, and students take turns performing their poems for their classmates and other visitors. Students' expressive and interpretive readings of their poems are responded to with warm applause (or, harkening back to a previous generation, with the snapping of fingers). I'll never forget the cold, snowy day in January when a fourth grader gave a heartfelt rendition of *The Cremation of Sam McGee* (Service, 1907/1986). I can still feel the shivers it sent down my spine.

Readers Theatre is another very natural and authentic way to promote repeated readings. Readers Theatre does not rely on costumes, movement, props, or scenery to express meaning—just the performers and their voices as they face their audience with script in hand. For students to perform a Readers Theatre script in a



meaningful and engaging manner, they need to practice the script beforehand. Students love to perform for an audience when they are given sufficient opportunities to rehearse the script. In a 10-week implementation of Readers Theatre in which small groups of second-grade students were introduced to, practiced, and performed a new script each week, students made significant gains in reading rate and overall reading achievement as measured by an informal reading inventory (Martinez, Roser, & Strecker, 1999). Through the repeated readings inherent in preparation for Readers Theatre, students made an average rate gain of 17 words per minute, about the gain that could be expected in an entire year (Rasinski, 1999), while students engaged in more traditional reading activities made less than half the gain the Readers Theatre students experienced. In addition to its application in classroom settings, Rinehart (1999) found that Readers Theatre was a particularly effective and motivating approach for students experiencing reading difficulties.

Paired reading (Topping, 1987), echo reading, choral reading, and reading with talking books are ways to provide support for less fluent readers. Topping (1987), for example, found that paired reading could significantly accelerate students' reading fluency and overall proficiency. In our university reading clinic we ask parents of struggling readers to engage in a form of paired reading with their children for 10 to 15

Teachers need to be aware of children's needs and plan accordingly with instruction that meets those needs.

> minutes each evening. In our version of paired reading, parents read a brief poem or passage to their children. This is followed by the parent and child reading the text together several times. Finally, the child reads the text to the parent; the parent responds to the child's reading with enthusiastic and authentic praise for a job well done. We have found that children who engage in this form of paired reading make significant

gains (in as little as 5 weeks) over children who receive clinical tutoring without the parental paired reading support (Rasinski, 1995). Similar types of paired and supported reading done in the classroom with less fluent readers have been found to result in improvements in reading rate and overall reading achievement (Rasinski, Padak, Linek, & Sturtevant, 1994).

Buddy reading is another excellent example of how teachers can create complex instructional scenarios that are engaging, authentic, and lead to gains in fluency. Let's look at a third grader who is having trouble reading. We know that repeated readings lead to fluency gains (Samuels, 1979). We also know that supported reading in the form of paired reading will also lead to gains in fluency, word recognition, and comprehension (Topping, 1987). This child's third-grade teacher, cognizant of his struggle with fluency, decides, with the child's permission, to pair this third grader with a second grader who is also having difficulty in reading. The third grader will meet with the second grader twice a week and read with her a passage from one of the second grader's textbooks for about 20 minutes. In anticipation of each meeting, the third grader needs to practice the assigned passage (which will be somewhat easier for the third grader to read because it is at a difficulty level appropriate for the second grader) so that he can read it with accuracy and expression with his partner. This may require two or three or more readings of the passage. Yet the third grader does so enthusiastically, for he has a real reason to practice.

When the partners read, first the third grader reads the passage to his partner, then they read it together once or twice, and then, if time allows, the second grader reads it while the partner follows along and provides support and encouragement. The practice is natural and the outcome is clear. Through repeated readings of somewhat easier texts the third grader makes significant strides in his reading fluency and overall reading. The second grader, with the additional modeled and paired reading support, makes significant gains in her reading as well.

The opportunities to create authentic and engaging reading instruction that meets the needs of all readers, but especially inefficient and disfluent readers, are enormous. Creative and informed teachers have been designing reading instruction that meets the needs of their students



for years. We need to empower all teachers to do the same. Teachers need to be aware of children's needs and plan accordingly with instruction that meets those needs. Slow, disfluent reading is one indication of a problem for a significant number of young readers.

The goal in fluency instruction is not fast reading, although that often happens to be a byproduct of the instruction, but fluent and meaning-filled reading. To this end I have found that reading to students is a wonderful way to model the connection between fluent reading and meaningful reading. Often I will read to students in as meaningful and expressive a voice as possible. Then, after I have read the selection and discussed its meaning with students, I will draw their attention to my reading of the passage. I will ask them to remember how I read the passage and how my expressiveness affected their understanding. "What did that long pause in my reading make you think? What happened when I read this part in a soft voice? How did my reading this section fast and loud affect how you understood this part of the story? And when I read these words very slow and deliberately, what did that do for for you?" Sometimes I will read a poem or text from various points of view: as if I am angry, as if I am calm, or as if I am nervous. Then I will discuss with students how the expression I embedded in the words helped to communicate to the listener my own point of view. This sort of reading and discussion helps students develop a metacognitive understanding that the meaning of a passage is not carried only in the words, but also in the way the words are presented to the reader. It also provides a model for students' own meaningful, expressive, and contextualized reading, whether orally to an audience or silently with that inner voice that is heard only by the reader.

Reading to students and discussing the nature of the reading allows us to focus on the flexible attitude readers need to bring to the reading act. Fluent and understandable reading, not fast reading, is the goal of our instruction. Fluent reading is often quick paced, but not always. Sometimes, especially with difficult, technical, expository, or unfamiliar content texts, readers need to slow down and process texts more deliberately. Reading these more challenging passages to students and discussing their understanding helps students realize that a truly fluent reader is one who is able to adjust his or her reading rate according to the challenge posed by the text and the information the reader needs to get from the text.

Do not ignore reading rate

I do not wish to take anything away from comprehension as the desired and ultimate result of reading and reading instruction. Rather, the point I am hoping to make is that we need to take the notion of slow, inefficient, disfluent reading seriously. Even with adequate comprehension, slow and labored reading will turn any school or recreational reading assignment into a marathon of frustration for nearly any student.

A slow reading rate may be symptomatic of inefficient word recognition or lack of sensitivity to the phrase—the natural unit of meaning in reading. But these problems can be addressed through authentic and engaging instructional activities and routines that can be woven seamlessly into the regular reading curriculum and that are appropriate for all students, not just those identified as disfluent. As reading teachers, diagnosticians, and specialists, we need to be aware of the importance of reading rate as a diagnostic indicator and to use reading rate as one of many tools for assessing students' overall reading performance. To ignore reading rate when assessing children's reading and designing appropriate instruction may do a major disservice to many readers who struggle with reading.

References

- Anderson, R.C., Wilson, P.T., & Fielding, L.G. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly*, 23, 285–303.
- Carver, R.P. (1990). *Reading rate: A review of research and the*ory. San Diego, CA: Academic Press.
- Denman, G.A. (1988). When you've made it your own...: Teaching poetry to young people. Portsmouth, NH: Heinemann.
- Graves, D.H. (1992). *The reading/writing teacher's companion: Explore poetry*. Portsmouth, NH: Heinemann.
- LaBerge, D., & Samuels, S.J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293–323.
- Martinez, M., Roser, N., & Strecker, S. (1999). "I never thought I could be a star": A Readers Theatre ticket to fluency. *The Reading Teacher*, 52, 326–334.
- Perfect, K.A. (1999). Rhyme and reason: Poetry for the heart and head. *The Reading Teacher*, 52, 728–737.
- Pinnell, G.S., Pikulski, J.J., Wixson, K.K., Campbell, J.R., Gough, P.B., & Beatty, A.S. (1995). *Listening to children read aloud.* Washington, DC: U.S. Department of Education, National Center for Education Statistics.

- Postlethwaite, T.N., & Ross, K.N. (1992). *Effective schools in reading*. The Hague: International Association for the Evaluation of Educational Achievement.
- Rasinski, T.V. (1995). Fast Start: A parent involvement reading program for primary grade students. In W. Linek & E. Sturtevant (Eds.), *Generations of literacy: The 17th yearbook* of the College Reading Association (pp. 301–312). Harrisonburg, VA: College Reading Association.
- Rasinski, T.V. (1999). Exploring a method for estimating independent, instructional, and frustration reading rates. *Reading Psychology: An International Quarterly*, 20, 61–69
- Rasinski, T.V., & Padak, N. (1998). How elementary students referred for compensatory reading instruction perform on school-based measures of word recognition, fluency, and comprehension. *Reading Psychology: An International Quarterly*, 19, 185–216.
- Rasinski, T.V., Padak, N., Linek, W.L., & Sturtevant, E. (1994). Effects of fluency development on urban second-grade readers. *Journal of Educational Research*, 87, 158–165.

- Rinehart, S. (1999). "Don't think for a minute that I'm getting up there": Opportunities for readers' theater in a tutorial for children with reading problems. *Reading Psychology: An International Quarterly*, 20, 71–89.
- Samuels, S.J. (1979). The method of repeated readings. *The Reading Teacher*, *32*, 403–408.
- Schreiber, P.A. (1980). On the acquisition of reading fluency. Journal of Reading Behavior, 12, 177–186.
- Service, R. (1986). *The cremation of Sam McGee*. New York: Greenwillow. (Original work published 1907)
- Stanovich, K.E. (1985). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360–407.
- Topping, K. (1987). Paired Reading: A powerful technique for parent use. *The Reading Teacher*, 40, 608–614.
- White, S. (1995). Listening to children read aloud: Oral fluency. Washington, DC: U.S. Office of Education, Office of Educational Research and Improvement.