

Helping Students Become Accurate, Expressive Readers: Fluency Instruction for Small Groups

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Ensuring that students become fluent readers is one of the major goals of reading instruction (Kuhn & Stahl, 2003; National Institute of Child Health and Human Development, 2000). One reason for its importance is that fluent readers no longer have to intentionally decode the majority of words they encounter in a text. Instead, they can recognize words both automatically and accurately. A second, and equally important, reason is that fluent readers are able to read texts with expression or prosody. It is this combination of accuracy, automaticity, and prosody that makes oral reading sound like spoken language. Finally, it is becoming increasingly apparent that fluency plays an important role in terms of a reader's ability to construct meaning from text, the ultimate goal of reading instruction.

Although recently the subject has begun to receive greater amounts of attention (Kuhn & Stahl, 2003; National Institute of Child Health and Human Development, 2000), fluency has often been overlooked within the literacy curriculum. There are several reasons why fluency has failed to receive greater emphasis in terms of reading instruction to date. Among these are the prevalence of strategies designed for individual instruction (Kuhn, 2003), an assumption that increased amounts of decoding instruction would automatically lead to improved fluency (Allington, 1983; Fleisher, Jenkins, & Pany, 1979/1980), and reliance on round-robin reading

as one of the primary approaches for oral reading instruction (Ash, Kuhn, & Walpole, 2003).

Fluency's Role in the Reading Process

Before deciding to devote any of the limited time available for reading instruction to improving fluency, it is important to understand the ways in which fluent reading contributes to skilled reading in general and comprehension in particular. There are two primary ways in which fluency plays a part in learners' reading development (Kuhn & Stahl, 2003; National Institute of Child Health and Human Development, 2000; Samuels, 1979; Schreiber, 1991). The first involves the development of automatic word recognition, while the second deals with prosody, or those elements of fluency that allow oral reading to sound like spoken language.

Contribution of Automatic Word Recognition to Comprehension

Skilled readers share certain attributes. For example, they are able not only to identify words accurately but also to recognize them instantly. This is important because readers who need to spend a significant portion of their time identifying individual words rarely have enough attention left over to focus on a text's meaning (Adams, 1990; LaBerge & Samuels, 1974; Perfetti, 1985; Stanovich, 1980). It is also

important to note that, in order to ensure adequate comprehension, learners must develop automatic word recognition through the extensive reading of connected text (e.g., Chomsky, 1976; Fleisher et al., 1979/1980) rather than simply developing the ability to recognize words in isolation.

Contribution of Prosody

While automatic word recognition ensures that fluent readers can accurately and effortlessly decode text, it does not account for their ability to make oral reading sound like spoken language (Stahl & Kuhn, 2002). There is an implicit understanding that fluency involves reading with expression or prosody. In other words, fluent reading incorporates prosodic features such as pitch, stress, and the use of appropriate phrasing (Dowhower, 1991; Schreiber, 1991). As with automaticity, it is also important to look at the ways in which prosody relates to comprehension.

Learners who have not achieved fluency read either in a word-by-word manner or by grouping words in ways that do not parallel spoken language (Dowhower, 1991; Reutzel, 1996; Schreiber, 1991). It is often the case that their reading is monotonous as well. These qualities reflect their inability to transfer prosodic elements that occur naturally in speech onto written text. Fluent readers, on the other hand, make appropriate use of phrasing, pitch, and emphasis in their reading (Chall, 1996; Dowhower; Schreiber). In so doing, they manage to make their oral reading sound like spoken language (Stahl & Kuhn, 2002). However, readers are able to employ prosody correctly only as they become aware of the connection between written and oral language. Conversely, the correct use of prosody serves as an indicator of a reader's understanding of the material because without such an understanding it would be impossible to apply these elements appropriately. It is important to note that this ability develops as learners listen to and read along with skilled models of expressive reading. Given this understanding of the role automaticity and prosody play in the ability to construct meaning from text, it seems likely that instruction designed to develop learners' fluency

will lead to improvements in their comprehension as well.

Promoting Fluent Reading Through Flexible Grouping

In order to ensure that fluency instruction is included in the curriculum, it is necessary to create strategies that are classroom-friendly and that can be easily integrated within current literacy practice. One such example of effective literacy instruction is that of flexible grouping. Flexible grouping consists of temporary groups that vary in membership and can be based upon either student interest or instructional needs (Reutzel, 2003). Because the groups are not permanent, small numbers of students can be brought together to receive instruction designed to meet their specific learning needs. Therefore, it seems that it would be beneficial to develop a strategy that combines effective fluency instruction within a flexible grouping format. Such a strategy can target those learners who are experiencing difficulty making the transition from purposeful decoding to fluent reading.

With these requirements in mind, I decided to adapt a modification of the traditional repeated-reading strategy and a wide-reading strategy, in which students choral or echo read an equivalent amount of text without repetition, for use with small groups of struggling second-grade readers. I considered it important to further investigate these strategies for two reasons. First, several earlier studies found that repeated readings and wide-reading approaches led to equivalent gains in fluency development (Kuhn, 2000; Kuhn & Stahl, 2003). If it is the case that both procedures lead to equivalent growth, then it may be reasonable to make use of both forms of instruction as part of a fluency-oriented curriculum. Second, given the lack of attention to prosody in many previous studies, I felt it was important to focus on expressive oral reading as one of my goals. Again, it is hoped that such an emphasis will serve as a means of assisting students in the development of their own use of expression and, ultimately, their comprehension.

Subjects and Design

My project was designed to assess the effectiveness of a modified repeated-reading strategy, fluency-oriented oral reading (FOOR), and a wide-reading approach, in which students read equivalent amounts of nonrepetitive text, on the fluency development of struggling readers within a flexible grouping format. I looked at the two strategies in terms of promoting both accurate and automatic word recognition, as well as prosody, among the learners. I also wanted to see if the procedures led to growth in the students' comprehension because, as was noted above, gains in fluency appear to lead to improved comprehension.

Twenty-four second graders were selected to participate in this project. Second grade was selected because it is generally seen as the point at which students make the transition to fluent reading (Chall, 1996; Kuhn & Stahl, 2003; Rasinski, Padak, Linek, & Sturtevant, 1994). The students who took part in this project attended a low- to middle-socioeconomic-status public school (50–60% free or reduced cost lunch) in a small southeastern U.S. city. Of the 24 students, 19 were African American, 4 were European American, and 1 was Hispanic. There were 10 boys and 14 girls, and all the students spoke English as their primary language.

The participating students were reading at the first-grade level or below according to the Qualitative Reading Inventory (QRI, 1988) and Qualitative Reading Inventory-II (QRI-II, 1995), and their teachers indicated they were having difficulty moving beyond basic decoding skills. However, when their listening comprehension on second-grade passages of the QRI-II was assessed, the students were able to demonstrate understanding of the text. As a result, both the teachers and I considered it likely that the children would benefit from extra opportunities to develop their reading. It is also important to note that, although the students' groups remained intact for the six weeks of the intervention, they were not part of an existing subgroup within their classrooms and came together only for this short-term intervention.

The size of the reading groups was determined in consultation with the classroom teachers. We discussed what they considered to be a realistic number for small-group literacy instruction, with four to six students suggested as reasonable for such activities. After reflection, I decided to include six per group because of the possibility of attrition. The study itself consisted of three intervention groups: a fluency-oriented oral reading (FOOR) group, a wide-reading group, and a listening-only group. The listening-only group was included as a way to counter the Hawthorne effect, in which students show improvement simply as a result of their participation in a study. The groups were taken from their classrooms as a cohort and randomly assigned, without replacement, to an instructional intervention. In addition to these three groups, I included a control group. The control group consisted of two students from each of the participating classrooms. These students did not receive any reading instruction beyond what was occurring in their own class. Because the students in each of the other groups were taken as a cohort from a particular classroom, I felt the students in the control group would represent a balance of the instructional approaches used by the classroom teachers. The intervention involved 18 sessions over a six-week period. These occurred three times a week for 15 to 20 minutes each.

Reading Material

The students who participated were exposed to a variety of literacy materials. A series of 18 trade books were identified using either Fountas and Pinnell (1999) or the FEP/Booksource guide (1998) as ranging from the late first- through the second-grade instructional level [Table 1]. These levels were confirmed by a second-grade teacher with over 20 years' experience as an elementary and a Reading Recovery instructor. By presenting readers with a range of texts, including passages at the upper end of their instructional level, the treatment was designed to promote growth in what Vygotsky (1978) referred to as the Zone of Proximal Development, or that range in which learners can achieve with assistance what they

Table 1
Books Selected for Intervention

Amelia Bedelia (1992) by Peggy Parish. New York: HarperCollins.
Arthur's Funny Money (1981) by Lillian Hoban. New York: HarperCollins.
Arthur's Prize Reader (1979) by Lillian Hoban. New York: HarperCollins.
Aunt Eater Loves a Mystery (1987) by Doug Cushman. New York: HarperCollins.
Aunt Eater's Mystery Vacation (1993) by Doug Cushman. New York: HarperCollins.
Bedtime for Frances (1995) by Russell Hoban. New York: HarperCollins.
Big Max (1992) by Kin Platt. New York: HarperCollins.*
The Case of the Cat's Meow (1978) by Crosby Bonsall. New York: HarperCollins.
The Case of the Dumb Bells (1982) by Crosby Bonsall. New York: HarperCollins.*
The Case of the Two Masked Robbers (1988) by Lillian Hoban. New York: HarperCollins.
Come Back, Amelia Bedelia (1995) by Peggy Parish. New York: HarperCollins.*
The Fire Cat (1988) by Esther Averill. New York: HarperCollins.
Frog and Toad Are Friends (1970) by Arnold Lobel. New York: HarperCollins.
Frog and Toad Together (1979) by Arnold Lobel. New York: HarperCollins.*
The Golly Sisters Go West (1985) by Betsy Byars. New York: HarperCollins.*
Harry the Dirty Dog (1956) by Gene Zion. New York: HarperCollins.
Hooray for the Golly Sisters (1990) by Betsy Byars. New York: HarperCollins.
Whistle for Willie (1964) by Jack Ezra Keats. New York: Puffin.*

* indicates a book read by the fluency-oriented oral reading group.

are unable to accomplish on their own. The books used for the project included *Harry the Dirty Dog* (1956) by Gene Zion, *Whistle for Willie* (1964) by Ezra Jack Keats, and *The Golly Sisters Go West* (1985) by Betsy Byars.

Procedures

As was mentioned earlier in the article, many of the strategies developed to assist learners in becoming fluent readers are designed for individuals. The best known of these approaches is

that of repeated readings. This method requires students to read a "short, meaningful passage several times until a satisfactory level of fluency is reached" (Samuels, 1979, p. 404). In a review of this method, Dowhower (1989) indicated that passages should be short, ranging from 50–300 words; that students should have about an 85% accuracy rate on their initial reading of the passage; and that the optimal number of repetitions of a passage is between three and five.

However, because one goal of this study was to determine whether repeatedly reading text and reading equivalent amounts of nonrepeated text led to comparable growth in reading fluency, I felt that the use of complete stories would provide a closer parallel to the other conditions. Therefore, I modified the original repeated readings approach outlined above so that students repeatedly read a story three to four times over the course of the three weekly sessions, a method similar to other modifications of repeated readings (e.g., Hoffman & Crone, 1985; Stahl, Heubach, & Cramond, 1997).

The fluency-oriented oral reading strategy (FOOR) made use of several elements that have proved successful in earlier fluency studies (Hoffman & Crone, 1985; Koskinen & Blum, 1986; Morris & Nelson, 1992) including modeling, repetition, positive feedback from instructors or peers, and opportunity for oral rendition of practiced texts. This intervention occurred over a three-day cycle. On Day 1, I introduced a story and echo read the text with the students. Depending upon the length of the text, the students then had the opportunity to chorally read part or all of the text along with me. On Day 2, the students broke into pairs and, reading alternate pages, reread the entire text with a partner. After completing the text once, if time permitted, the students had the opportunity either to practice a section of text with their partners or to repeat the entire story a second time reading alternate pages. On Day 3, the students had the opportunity to participate in a final choral reading of the text and were invited to perform a portion of the selection before the group if they so wished.

Wide reading was selected as the second approach in order to determine the effectiveness of scaffolded, but nonrepeated, reading in the development of students' fluency. Previous studies have indicated that when students read significant amounts of connected text with teacher support, such as is available in echo or choral readings of a story, they are as likely to demonstrate growth in their reading fluency as their peers who repeatedly read fewer texts over the same period (Kuhn & Stahl, 2003). Therefore, the wide-reading component incorporated the echo or choral reading of a given text in order to support the students in their development of accurate and automatic word recognition along with prosody. Again, students participated in three sessions per week. These sessions involved a single scaffolded reading of a different story at each meeting. The same six books used with the fluency-oriented oral reading group were used here; however, 12 additional selections were included in order to ensure that the participating students were reading new material at each sitting. Each child in both the FOOR and the wide-reading condition was provided with an individual copy of the texts.

The third condition consisted of a listening-only component in which the same 18 stories read in the wide-reading sessions were covered. However, rather than having students read the stories themselves, I provided an expressive rendition. This ensured that the students were exposed to the same amount of literature as their peers in the wide-reading condition. As was mentioned above, the control group did not participate in any literacy activities outside of the regular curriculum.

Assessment Materials

In addition to the time spent working with the trade books, there was a period of individual pre- and posttesting. The students' comprehension, as well as their accurate and automatic word recognition within text, was assessed using the QRI and the QRI-II, which are informal reading inventories. Word recognition in isolation was assessed using the Test of Word Recognition

Efficiency (TOWRE), a standardized measure. In addition, the National Assessment of Educational Progress's (NAEP) Oral Reading Fluency Scale was used to evaluate the students' oral reading.

Results and Discussion

After the assessment measures were readministered at the end of the intervention, certain differences emerged between the groups (Kuhn, 2000). To begin with, the wide-reading and FOOR groups were able to identify a greater number of words in isolation than did the listening-only or control groups on the TOWRE. Similarly, the FOOR and wide-reading groups demonstrated greater growth in terms of the number of correct words read per minute on the QRI and QRI-II passages at their independent and instructional levels than did either the students in the listening-only group or the controls. Next, two raters independently assessed the students' oral reading of the QRI passages using the NAEP Oral Reading Fluency Scale. According to both raters, the reading of the students in the FOOR and wide-reading groups was more fluent than that of the students in the listening-only and control groups. However, according to their responses to the questions that correspond with the passages on the QRI and QRI-II, only the students in the wide-reading group showed improved comprehension.

Given that the FOOR and the wide-reading interventions incorporated extensive opportunities to read connected text, provided models of expressive reading, and used both challenging materials and student accountability, it is not surprising that the students who participated in these groups made gains in word recognition and prosody, whereas the students in the control group did not. However, it is worth noting that the students who were exposed to the stories through the listening-only condition did not make similar growth. This lends weight to the argument that, while reading aloud to students is important in fostering a love of reading, learners must actively engage in the reading of connected text if they are to become skilled readers.

Further, while the FOOR and the wide-reading groups both showed improvements in terms of prosody and word recognition, only the wide-reading group showed greater growth in terms of comprehension. One possible explanation of these findings involves what students may have considered to be the implicit focus of the sessions. Because the amount of time available for working with the students was limited, I chose to focus primarily on smooth, expressive reading. As a result, comprehension and vocabulary were dealt with implicitly rather than explicitly. Because the FOOR approach incorporated significant amounts of repetition, students may have seen word recognition and expression as the dominant focus. While the students enjoyed the stories selected, each story, or portion of a story, was reread several times. Given this pattern, it is possible that, after the initial reading, the students focused their attention on expression and accurate word recognition rather than on the text's meaning. It is also possible that they brought this understanding to their posttests, resulting in gains in prosody and word recognition but not in comprehension.

The wide-reading group, on the other hand, read a new book at each session. As a result, comprehension, expression, and word recognition may have been viewed as having equivalent importance. It could be that the students developed a broader implicit focus, one that included the understanding and enjoyment of the stories as well as the accurate and expressive reading of the text. It is equally possible that this focus carried over to the posttesting and led to the wide-reading group's growth in comprehension as well as in word recognition and prosody.

Similar findings were noted in two previous studies designed to assist readers in their fluency development (O'Shea, Sindelar, & O'Shea, 1985, 1987). O'Shea et al. argued that while repeated readings led to improved levels of fluency, learners did not automatically shift their attention to the comprehension of text. Instead, they felt it might be necessary to actively focus the readers' attention on the content of a passage in order to show improvements in their comprehension. Their research indicated that such a focus did

indeed lead to improvements in the students' ability to construct meaning from text. Anderson, Wilkinson, and Mason (1991) also reported similar findings when working with small groups of third graders using a guided reading lesson. They found that when the focus of a lesson was on meaning, students made greater gains in comprehension than when the focus was on word analysis and accurate reading. These findings were stronger for the low and average readers than for their more skilled peers. Therefore, it seems a reasonable possibility that learners may look toward whatever cues exist, whether implicit or explicit, to decide where to focus their attention during reading.

An alternative explanation for the wide-reading group's growth in comprehension is based upon the fact that learners' ability to construct meaning may improve as a result of increasing the amount of connected text they are responsible for reading (Anderson, Wilson, & Fielding, 1988; Guthrie, 1982; Leinhardt, Zigmond, & Cooley, 1981). In the current study, the students in the wide-reading group read 18 texts beyond those they encountered in the classroom, whereas the FOOR group read only 6. And, while the listening-only group was also exposed to 18 stories, the students did not read the books themselves. Because the post-test measure required that the students not only respond to a series of stories but also read the passages themselves, it seems reasonable that the differing requirements in each group led to different outcomes and that improvements in comprehension may have occurred as the result of the students actively reading a wide range of texts.

Implications for the Classroom

Despite the differences in results, both the FOOR and the wide-reading approaches used in flexible grouping formats seem to provide effective fluency-oriented instruction. These approaches ensure that students have increased opportunities to read connected text and create an expectation of student accountability for the material. Further, both approaches provide a model of expressive reading, are relatively easy to implement, and can be used with a variety of texts

from basal readers to the more challenging types of trade books that were used in this study. At the same time, the differing results from the two strategies indicate that the FOOR strategy might be more effective for students who need to work primarily on the mechanics of their reading, or automaticity and prosody, whereas the wide-reading approach could be used with students who need to work on improving not only their word recognition and expression but also their comprehension. However, given the importance of reading fluency in the overall reading process, both approaches appear to be effective means of integrating fluency instruction with the literacy curriculum.

References

- Adams, M.J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Allington, R.L. (1983). Fluency: The neglected reading goal. *The Reading Teacher*, 36, 556–561.
- Anderson, R.C., Wilkinson, I.A.G., & Mason, J.M. (1991). A microanalysis of the small-group, guided reading lesson: Effects of an emphasis on global story meaning. *Reading Research Quarterly*, 26, 417–441.
- 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. doi: 10.1598/RRQ.23.3.2
- Ash, G.E., Kuhn, M.R., & Walpole, S. (2003, December). *Flying in the face of research: Inservice teachers' use of round robin reading (research in progress)*. Paper presented at the National Reading Conference, Scottsdale, AZ.
- Chall, J.S. (1996). *Stages of reading development* (2nd ed.). Fort Worth, TX: Harcourt-Brace.
- Chomsky, C. (1976). After decoding: What? *Language Arts*, 53, 288–296.
- Dowhower, S. (1989). Repeated reading: Research into practice. *The Reading Teacher*, 42, 502–507.
- Dowhower, S.L. (1991). Speaking of prosody: Fluency's unattended bedfellow. *Theory Into Practice*, 30, 158–164.
- FEP/Booksource. (1998). *1998 books for early childhood to adult*. St. Louis, MO: The Booksource.
- Fleisher, L.S., Jenkins, J.R., & Pany, D. (1979/1980). Effects on poor readers' comprehension of training in rapid decoding. *Reading Research Quarterly*, 15, 30–48.
- Fountas, I.C., & Pinnell, G.S. (1999). *Guided reading: Good first teaching for all children*. Portsmouth, NH: Heinemann.
- Guthrie, J.T. (1982). The book flood. *Journal of Reading*, 26, 286–288.
- Hoffman, J.V., & Crone, S. (1985). The oral recitation lesson: A research-derived strategy for reading basal texts. In J.A. Niles & R.V. Lalik (Eds.), *Issues in literacy: A research perspective, 34th yearbook of the National Reading Conference* (pp. 76–83). Rochester, NY: National Reading Conference.
- Koskinen, P.S., & Blum, I.H. (1986). Paired repeated reading: A classroom strategy for developing fluent reading. *The Reading Teacher*, 40, 70–75.
- Kuhn, M.R. (2000). *A comparative study of small group fluency instruction*. Unpublished doctoral dissertation, University of Georgia, Athens.
- Kuhn, M.R. (2003). Fluency in the classroom: Strategies for whole-class and group work. In L.M. Morrow, L.B. Gambrell, & M. Pressley (Eds.), *Best practices in literacy instruction* (pp. 127–142). New York: Guilford.
- Kuhn, M.R., & Stahl, S. (2003). Fluency: A review of developmental and remedial strategies. *The Journal of Educational Psychology*, 95, 1–19.
- LaBerge, D., & Samuels, S.J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293–323.
- Leinhardt, G., Zigmond, N., & Cooley, W.W. (1981). Reading instruction and its effects. *American Educational Research Journal*, 18, 343–361.
- Morris, D., & Nelson, L. (1992). Supported oral reading with low-achieving second graders. *Reading Research and Instruction*, 31, 49–63.
- 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. Reports of the subgroups* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office. Retrieved May 12, 2003, from <http://www.nichd.nih.gov/publications/nrp>
- O'Shea, L.J., Sindelar, P.T., & O'Shea, D.J. (1985). The effects of repeated readings and attentional cues on reading fluency and comprehension. *Journal of Reading Behavior*, 17, 129–142.
- O'Shea, L.J., Sindelar, P.T., & O'Shea, D.J. (1987). The effects of repeated readings and attentional cues on the reading fluency and comprehension of learning disabled readers. *Learning Disabilities Research*, 2, 103–109.
- Perfetti, C.A. (1985). *Reading ability*. New York: Oxford University Press.
- Rasinski, T.V., Padak, N., Linek, W., & Sturtevant, E. (1994). Effects of fluency development on urban second-grade readers. *Journal of Educational Research*, 87, 158–165.
- Reutzel, D.R. (1996). Developing at-risk readers' oral reading fluency. In L.R. Putnam (Ed.), *How to become a better reading teacher* (pp. 241–254). Englewood Cliffs, NJ: Merrill.
- Reutzel, D.R. (2003). Organizing effective literacy instruction: Grouping strategies and instructional routines. In L.M. Morrow, L.B. Gambrell, & M. Pressley (Eds.),

- Best practices in literacy instruction* (2nd ed., pp. 241–267). New York: Guilford.
- Samuels, S.J. (1979). The method of repeated readings. *The Reading Teacher*, 32, 403–408.
- Schreiber, P.A. (1991). Understanding prosody's role in reading acquisition. *Theory Into Practice*, 30, 158–164.
- Stahl, S.A., Heubach, K., & Cramond, B. (1997). *Fluency-oriented reading instruction* (Reading Research Rep. No. 79). Athens, GA: National Reading Research Center.
- Stahl, S.A., & Kuhn, M.R. (2002). Making it sound like language: Developing fluency. *The Reading Teacher*, 55, 582–584.
- Stanovich, K.E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly*, 16, 32–71.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds. & Trans.). Cambridge, MA: Harvard University Press. (Original work published 1934)

Questions for Reflection

- Think about the fluency instruction in your classroom. Does it emphasize automaticity, accuracy, and prosody? Does it make the connection from fluency to comprehension? How are the approaches described in this article similar or different from those you currently use in your instruction? What aspects of FOOR and wide reading could you incorporate in order to improve your classroom practice?
- What types of instructional grouping have you found most effective? How do you manage small-group work in your classroom? Can you see ways that peer coaching could be incorporated in fluency instruction with your students?
- How do you assess reading fluency among your students? Do your assessment methods take into account *all* the components that go into making a fluent reader?