# Chiliford Press **Developing Fluency in the Context** of Effective Literacy Instruction

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Since the early 1990s, I have spent considerable time encouraging teachers to teach fluency. In this work, I have employed a framework I developed to guide the improvement of PreK-12th-grade literacy achievement, and that framework (the Chicago Reading Framework)—more than any other—places great emphasis on the teaching of fluency (Shanahan, 2001). As Director of Reading for the Chicago Public Schools, I mandated that all 600 of our schools teach fluency on a daily basis. I even coauthored the fluency section of the National Reading Panel (2000) report, which found that fluency could be taught, and that such teaching improved reading achievement, including reading comprehension, and later I developed a program to help primary grade teachers to teach fluency (Shanahan, 2004).

Yes, my credentials on fluency instruction are impeccable. Yet my role in this volume is less to promote fluency instruction (there are more than enough excellent chapters that do this) than to put fluency into a fitting instructional context. To explain the reason for this, let me relate something from my experience as a consultant to school districts. Over the years, I gained a reputation as an effective staff developer. This meant two things: Teachers liked my presentations and often adopted the ideas I shared at the institute or workshop into their classroom routines. If I was brought in to do a workshop on vocabulary instruction, the teachers would start to teach vocabulary or would change how they were teaching it.

As good as I was at that kind of work, sadly, I rarely helped raise achievement. How could that be? I was showing teachers how to teach vocabulary—or comprehension, writing, and so on—in ways proven successful in research. The teachers were adopting these effective practices, and the results in terms of children's learning were ... well, less than gratifying. What was happening? The scenario that played out was usually something like this: I would encourage teaching an essential part of reading in sound ways; teachers would consequently drop some of the other essentials they were already addressing to accommodate the new stuff that I shared, and voilà, no improvement in reading. I assumed they would add vocabulary to their otherwise successful teaching routine. The teachers assumed they were supposed to do vocabulary instead of the terrific comprehension strategies they were teaching and ... well, you can see how the results of that would be a wash.

I stopped conducting those kinds of workshops long ago, and I'm glad, because now when I work with teachers and schools, reading achievement often does rise. In Chicago, 75% of the public schools—schools that serve 85% low-income students in a minority—majority district—improved in reading, and the lowest performing elementary schools in the district improved in reading as much as the higher performing schools for the first time in history. Fluency teaching was part of that, because fluency is part of the Chicago Reading Framework, but it was not the whole story. Fluency—or any other aspect of literacy that we teach—is not the whole story. Fluency is essential, but it is not a magic bullet. The success of fluency instruction depends not only on the quality of the teaching, but also on the degree to which quality teaching is *embedded in a full agenda* of other sound literacy instruction. A teacher—confident that fluency is *the* key to success—who drops phonics to clear space for fluency in the daily teaching schedule is making a bad trade.

The key to adding fluency, or any other important element, to a class-room routine is to ensure that all the other essentials are addressed, too. For me, an "essential" is an aspect of instruction that has been proven to make a difference in children's reading achievement. I am talking here about "scientific research-based reading" teaching, but that term is bandied about a lot these days, and my standards are high for determining which practices fit this description (Shanahan, 2002; Shavelson & Towne, 2002). Before I'm willing to endorse a practice as essential, it must have certain kinds of evidence behind it. There must be, for instance, studies that show that kids who get this kind of teaching do better than kids who don't. There must be evidence drawn from experimental studies in which some teachers adopt the new practice in their classrooms, while other, similar teachers continue as usual. The classrooms in the study must be roughly equal in reading achievement at the start, but they have to be different in

the end. There are standards of quality for such studies, and I expect this evidence to come from investigations that meet these quality standards. Finally, I don't think it is enough that a study or two support a particular finding. There should be many independent investigators who tried this practice in different places, but with consistent results (unlike in the physical sciences, this kind of replication does not "prove" that a particular approach "works," but it does show that many people were able to make it work under varied conditions—thus, my thinking is that if they can make it work, so can we).

The Chicago Reading Framework emphasizes three critical steps schools can take to improve achievement, and these steps help ensure the existence of the kind of instructional context in which fluency teaching should be embedded. These critical steps include (1) securing adequate amounts of instructional time for the teaching of reading and writing, (2) ensuring the teaching of all essential aspects of literacy, and (3) providing ongoing monitoring of student learning to allow for appropriate adjustments to teaching. Yes, fluency is an essential aspect of literacy and it should be taught, but the teaching of fluency will be most productive when teachers devote an appropriate amount of time to the teaching of literacy, when that time is divided among fluency and other essential elements of literacy that must be fostered, and when teachers are evaluating the adequacy of student progress along the way.

## THE ROLE OF INSTRUCTIONAL TIME

One thing that leaps out of the literature as being beneficial to literacy learning is sufficient amounts of instructional time (Fielding, Kerr, & Rosier, 2007; Fisher & Berliner, 1985; Meyer, Linn, & Hastings, 1991; Pressley, Wharton-McDonald, Mistretta-Hapston, & Echevarria, 1998). National surveys of teaching suggest that we fail to spend sufficient time teaching kids how to read and write well (Baumann, Hoffman, Duffy-Hester, & Ro, 2000). However, over the past decade, the 90-minute "reading block" has been widely adopted, particularly in the primary grades; teacher and principal surveys indicate that this arrangement is now used in more than 90% of Title I schools (U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, 2008). Unfortunately, observations of classroom reading instruction in such schools are not encouraging. Although Title I teachers schedule 90 minutes or more of daily reading instruction, much of this time is devoted to activities that are unlikely to improve reading or writing ability; primary grade children are commonly receiving less than 60 minutes per day of potentially productive reading instruction, and only about 5 minutes of

that time is aimed specifically at fluency instruction (Gamse, Jacob, Horst, Boulay, & Unlu, 2008). We've simply allowed lots of wonderful activities that have little to do with children's learning to encroach on reading and language arts time. In my schools, I require 2–3 hours per day of reading and writing instruction. That is a lot more time for learning than most teachers provide, and increasing the amount of instruction is a proven way to enhance achievement.

### **ESSENTIAL CONTENT COVERAGE**

As important as time might be, its value can only be realized through teaching. But teaching what? It is important to teach children to know or do those things that constitute literacy proficiency. In large-scale analyses of educational research, content coverage or curriculum focus stands out as the second most important factor, right after amount of instruction (Walberg, 1986; Wang, Haertel, & Walberg, 1990, 1993). Reading instruction is most effective when it focuses on those skills and abilities that give kids an advantage in learning to read (Barr, Dreeben, & Wiratchai, 1983; Fry & Lagomarsino, 1982; Roehler, 1992). That might seem like a no-brainer, but far too often I visit schools that neglect or barely touch upon some of these key areas of learning.

In the Chicago Reading Framework, I organize what needs to be taught into four categories and require equal amounts of teaching for each category. The amount of teaching doesn't necessarily have to balance each day, but each element should receive roughly equal attention over a week or two. There are four areas that I am convinced require regular teaching: word knowledge, fluency, comprehension, and writing. Teachers in my schools must teach each of these for 30–45 minutes per day.

Given that the purpose of this book is to explain fluency instruction, and that the purpose of this chapter is to put fluency into the larger instructional context, I detail each of these four categories, but with greater attention to fluency (not because it is most important—they are all equally important). Before turning to each component, let me explain why these particular components merit this much concentrated and continued instructional attention. Although all four components meet the selection standards I set, all of my examples here deal with how fluency satisfies these criteria.

#### CRITERIA FOR INCLUSION IN THE MODEL

To be included in this model, a component had to meet five basic requirements. First, it had to be a learning outcome and not an instructional practice. Too many instructional schemes emphasize teaching routines over

learning outcomes, and this is a big mistake. Research shows how difficult it is for teachers to keep focused on learning within the complexity of classroom life (Doyle, 1983). Good teachers manage to focus on learning, and less effective ones get wrapped up in the activities themselves. It is sort of like the old joke: When you are up to your neck in alligators, it is hard to remember that your purpose was to drain the swamp. With all the "alligators" out there in a challenging classroom, ineffective teachers often lose sight of the purpose. I don't want teachers aimed at guided reading, shared reading, the Whiz Bang ABC Reading Program, or at any other technique, practice, program, or approach. The research is pretty clear: Methods of teaching don't make that much difference if the content covered is equivalent (Bond & Dykstra, 1967). I don't want my teachers setting aside a certain amount of time each day to do a particular activity. I want them to set aside a certain amount of time each day to teach children to do particular things. Learning—not teaching—is the point.

Second, to be included, research studies had to demonstrate the *teachability* of a component. This means that there had to be several research studies showing that teaching could improve performance in that outcome. For example, the National Reading Panel (2000) examined 16 independent studies in which having students practice oral rereading of a text with some kind of feedback led to improved fluency in reading those texts. Furthermore, several other studies found that this kind of teaching led students to be more fluent, that is, to read texts aloud more accurately or quickly. It only makes sense to focus our instruction upon outcomes that can actually be taught.

Third, to be included as an essential outcome, research had to reveal the *generalizability* of a component. This means that there had to be several research studies proving that if one taught this particular aspect of literacy, overall reading achievement would improve. It is not enough to teach fluency, even if that instruction would result in better fluency, if this improvement doesn't, consequently, translate into better overall reading achievement. The National Reading Panel (2000) examined 16 independent studies in which fluency instruction not only improved fluency performance but also actually translated into higher reading achievement on silent reading comprehension tests.

Fourth, in order for a learning outcome to be essential in this model, it had to fit together in a coherent manner with the other components in the model. It had to be *combinable* with the other parts of the model, so there was a chance that the combination of components would lead to even better performance than would be obtained by attending to any one of the components alone. What this means is that, statistically, each component had to correlate positively and significantly with the others and with overall reading achievement as well. Student fluency performance has just that kind of pattern of relationship with other reading achievement variables (Fuchs, Fuchs, Hosp, & Jenkins, 2001).

Fifth, despite the correlations just noted, each outcome had to be an independent entity to justify inclusion in the framework. Instruction in one component should not necessarily lead to growth in all of the components. Evidence for independence could include case studies of children with learning disabilities and brain injuries who may excel in one or another component without commensurate levels of performance in the others (Coslett, 2000). In the case of fluency, many experts have assumed that it is simply the result of high-proficiency word recognition. If that were true, then the best way to teach fluency would be to put more time into teaching word recognition. In fact, research shows that although fluency is closely aligned with word recognition, it is also—at least in certain cases—a somewhat independent outcome. For instance, Carol Chomsky (1975) identified a sample of children high in decoding skills but low in fluency. Also, clinical studies have identified students who can read text fluently but without commensurate levels of comprehension (Kennedy, 2003). Independence matters, because it argues for the value of direct teaching of a specific outcome. Since phonics instruction doesn't lead to fluency for all kids, we teach phonics and fluency. Since fluency proficiency does not result in higher comprehension for all students, we teach fluency and comprehension. The surest way to success is to leave nothing to chance in children's learning.

The four key components that satisfy all five of these requirements are word knowledge, reading comprehension, writing, and fluency. And it is to each of these that I now turn.

# Word Knowledge

Word knowledge emphasizes two very different instructional goals. We need to teach children both to recognize written words and to expand their knowledge of word meanings. In most discussions of reading instruction, word meanings are categorized as part of reading comprehension, which makes sense, since both vocabulary and comprehension are focused on meaning. The reason I make such a different choice of organization is threefold. First, everything that we teach in reading, from the lowliest phonic skill to the loftiest interpretive strategy, should ultimately be connected to meaning. This suggests that there is nothing special about vocabulary in that particular regard that justifies categorizing it with reading comprehension. Second, I wanted there to be a consistent plan of instruction—in terms of amounts of time and areas of emphasis in my framework—across the grade levels. By putting word recognition together with word meaning, I have established a routine in which upper grade teachers spend similar amounts and proportions of time on word learning as primary grade teachers, albeit the emphasis of this word work does shift. Third, this plan requires a lot more vocabulary teaching than is accomplished in most instructional programs. When vocabulary is just a part of comprehension, there isn't a great deal of time devoted to its teaching. In this framework, once adequate word recognition proficiency is accomplished (in second or third grade for most kids), more substantial work with word meanings has to be provided.

In the primary grades, it is imperative that teachers give children substantial amounts of word recognition instruction, including phonemic awareness, phonics, and sight vocabulary teaching (National Reading Panel, 2000). Phonemic awareness instruction teaches children to hear and manipulate the separable sounds in words. Most kids benefit from approximately 18 hours of phonemic awareness instruction (about 15 minutes per day for a semester). Of course, some children don't need this much, and others may need more. In any event, phonemic awareness instruction should begin by kindergarten and continue until students can fully segment simple words (e.g., dividing the word *cat* into its separate sounds: /k//a//t/). Children who can hear the sounds within words are at a great advantage in figuring out the relationship between speech and print.

In addition to phonemic awareness, children should get daily phonics instruction. Phonics teaching aims to impart three kinds of knowledge: It should help children master the letter names and sounds, including the sounds related to common letter combinations such as *sh*, *ch*, *th*, and *ng*; it should help them to recognize and pronounce common spelling patterns, such as *ain*, *tion*, and *ight*; and it should guide children to use this information to decode and spell new words (that means reading and spelling practice should be regular parts of phonics instruction).

Additionally, there needs to be an emphasis on teaching children sight vocabulary; that is, they must learn to recognize some words immediately, without sounding out or any other obvious mediation. English uses some words with great frequency (words such as *the*, *of*, *was*, *can*, *saw*, *there*, *to*, and *for*), and if children can recognize these words easily and accurately, they will be better able to focus on the meaning of text.

It is perfectly appropriate to provide some direct instruction in word meaning during these early years, but the time devoted to this will need to be limited because of the decoding needs. That means most of the vocabulary teaching will be incidental during the earliest years of school (e.g., talking about words during read-alouds). However, as the phonics skills and sight vocabulary are mastered, all or most of the word teaching should shift to a more thorough, formal, and academic emphasis on vocabulary building or word meaning (Blachowicz & Fisher, 2000). Many approaches to the teaching of vocabulary have proven effective. The best instructional efforts require students to use new vocabulary in a wide variety of ways (speaking, listening, reading, writing), and guide them to analyze and explore rich, contextualized meanings of words and the interrelationships among words. Effective vocabulary instruction also includes small amounts of drill and practice and a considerable amount of review.

Finally, spelling instruction can be part of the word component as well. Such teaching should aim to help students spell in a conventional way, and can provide them with an opportunity to think systematically about how words are structured. Spelling instruction necessarily must be kept brief and is probably best accomplished in conjunction with the word recognition and word-meaning teaching that are the major instructional emphases within word knowledge.

Word knowledge is obviously complex. There are multiple aspects of word teaching, and the relative importance of the parts changes over time as children advance through the grades—with relatively less attention devoted to word recognition and more to word meaning over time. Word knowledge is central to reading achievement and is closely allied with fluency performance (Perfetti, Finger, & Hogaboam, 1978; Stanovich, 1981). Children who cannot recognize words quickly and easily—who lack strong decoding skills or extensive sight vocabularies—struggle when they try to read a text. They make lots of errors, and instead of moving along quickly and smoothly, they labor through a text, impelled more by their efforts to decode each word than by the flow of the author's ideas. Using the time devoted to word knowledge to develop expertise in the quick decoding and automatic recognition of words should ultimately contribute to fluency. And this appears to be a two-way street. Research shows that fluency instruction for poorer readers typically results in much improved word recognition abilities (National Reading Panel, 2000).

Vocabulary knowledge also has a role to play in fluency development. Fluency by its very nature is part rapid sequential decoding and part on-the-fly initial text interpretation. To read a text aloud successfully, a student not only has to recognize the words quickly and easily enough to be accurate but also has to have sufficient sense of the meaning of the message to make it sound like language. Vocabulary instruction generally helps in initial interpretation by familiarizing students with the meanings of a broad range of words, but it works, more specifically, in helping students correctly interpret homographs (words with one spelling but different pronunciations, depending on meaning), such as *read*, *minute*, *wind*, *bass*, *sow*, *does*, and *tear* (Plaut, 1996).

# **Reading Comprehension**

A second instructional component in my framework is the teaching of reading comprehension. Students need to be taught to achieve a deep understanding of text on their own, and this instruction has three major goals. We need to teach students to seek particular types of information when they read a text. We need to teach them how texts are organized or structured and how to use these organizational plans to remember or under-

stand information effectively. Last, we need to teach children a variety of thinking strategies or procedures they can use on their own before, during, and after reading to improve understanding and recall.

For young children, learning what kind of information is important—which needs to be attended to and remembered—entails some fairly general notions, such as the idea that both explicit information and inferential information are important (Raphael & Wonnacott, 1985). With development, text demands become more complex and tied to the disciplines, so instruction needs to emphasize the kinds of information that are important within the various disciplinary fields (i.e., history, science, mathematics, and literature) (Shanahan & Shanahan, 2008). It is not just type of information that matters either, because these disciplines differ as to how precise or approximate a reader's understanding has to be ("gist," for instance, is not well thought of in science or math texts).

Narrative and expository texts differ greatly in their organization, vocabulary, and even the reasons why someone might read them. Students benefit from experience and instruction in dealing with both of these text types. Some of the instruction should guide students to think about how these texts are organized. For narratives, that means teaching about plot structure (including, e.g., characters, problems, solutions, outcomes, time sequencing). Students need to learn analogous information about how expository texts are structured (e.g., problem–solution, cause–effect, comparison–contrast) as well as what types of information are likely to appear in particular types of texts. Social studies books, for example, usually provide information on the geography, economics, culture, and history of each major topic being discussed; knowing that allows a reader to analyze the text in those terms.

There is also a plethora of techniques or procedures that can be used by kids to guide their thinking about text more effectively on their own (National Reading Panel, 2000). Teaching students to monitor their reading (to make sure that they understand and know what to do about it when they do not), to ask their own questions, to summarize, and to translate text into graphic form are just a few of the techniques that have been found to improve reading comprehension.

It is important to remember that students benefit from comprehension instruction—not just comprehension practice. Too many teachers give assignments that require reading comprehension but do nothing to improve students' capacity to comprehend. Practice alone is insufficient. Children should be taught how to comprehend, and, in the Chicago Reading Framework, time is regularly devoted to this.

As has already been noted, fluency is closely connected to reading comprehension. Fluency instruction improves reading comprehension scores, and studies with proficient readers show that, even for them, rereading a

text improves interpretation, and improvement is first obvious in the fluency changes that take place. Fluency at its base is a kind of integration of word recognition and initial sentence interpretation (Young & Bowers, 1995).

#### Writing

Children need to be able to write their own texts. Reading and writing depend on much of the same information (including, e.g., knowledge of spelling patterns, text organization, vocabulary), and learning to read and write simultaneously can give children an advantage (Shanahan, 2005). Writing instruction should teach children to compose for a variety of purposes and audiences, using strategies that help them to solve various writing problems. The compositions that children write should make sense and effectively communicate their ideas.

Children need to know how to retell events (narrative writing), explain and analyze information (exposition), and argue a position (persuasion), and good instruction should show them how to do these effectively. Children need to know how to adjust their voice and message to meet the needs of an audience. They need to know how to write compositions that are appropriately elaborated, focused, and organized and that reflect proper mechanics, usage, grammar, and spelling. And students should have at their command a variety of techniques or strategies that can be used effectively and independently to prepare for writing and to revise and edit what they have drafted.

Writing is less obviously connected to fluency. I know of no study that looks at correlations between writing achievement and reading fluency, and I know of no experimental studies that look at the effects of writing instruction on reading fluency or reading fluency instruction on writing. It is evident that spelling accuracy within writing is closely connected to fluency, but this is more likely due to connections between word knowledge and fluency rather than a more general composition–fluency connection (Zutell & Rasinski, 1986). Nevertheless, writing proficiency in composing words and sentences has been found to be connected to reading achievement generally, and this likely means that regular attention to writing instruction could benefit fluency.

## **Fluency**

Fluency refers to the ability to read text aloud with sufficient speed, accuracy, and expression. Although fluency is important to both silent and oral reading, research suggests that oral reading practice and instruction are most effective for developing this ability (National Reading Panel, 2000). Activities such as paired or assisted reading, in which students take turns

reading portions of a text aloud to each other and give each other feed-back and rereading the text multiple times until it can be done well, have been found to be effective practices from the primary grades through high school. These practices have some commonalities: They all require oral reading, provide the reader with feedback and help, and require repetition of the reading until the text can be read well.

If a student is fluent with a particular text, the teacher has two choices. First, if the teacher believes the student is placed in an appropriate level of text reading, he or she only has to continue to monitor the child's reading (by listening), and—in my framework—the amount of fluency instruction for this student can be reduced (fluency is the only component of the framework that can be reduced in terms of time coverage, and this should only be done if the student is fluent at an appropriate level). Second, if the teacher thinks the student should be working on more difficult materials, he or she can have the child practice fluency in more difficult texts, including social studies or science books.

Students who are fluent with a text can usually read it with only about one mistake per 100 words, and they can read the text smoothly and quickly. Young children (through second grade) should strive to read a text at about 60–80 words per minute, while for older children reading should proceed at 100+ words per minute. Students also need to pay attention to punctuation and pause appropriately so that the text sounds like language.

What about round robin reading, in which a child reads a portion of text aloud with everyone else listening? It really has no place here. It is not that the oral reading practice provided by round robin is so bad—being really no different than what is provided in other kinds of oral reading activity—but that it is so brief (Stallings & Krasavage, 1986). Let's say the teacher is requiring 30 minutes per day of fluency work and has 30 children in class. Using round robin, the teacher would only be able to provide about 1 minute per day of reading per child under the best circumstances and only about 3 hours of practice per child across an entire school year. Using paired reading, in which children take turns reading and giving feedback to each other, that same teacher would be able to provide 15 times the amount of reading practice—15 minutes per day and 45 hours of individual practice per year!

It has often been asserted that fluency develops from silent reading practice and not just the kinds of oral reading practice lauded here. Accordingly, some teachers (and programs) include sustained silent reading in place of the fluency time. It should be noted that despite the logic of having students simply reading more, research doesn't actually support it, and without a credible research base, it seems unwise to replace a procedure that we know works (oral reading practice) with one of which we are uncertain (National Reading Panel, 2000).

Some teachers, of course, are afraid to turn their classes loose with something like paired reading, wary that the result will be mayhem rather than fluency. These teachers are correct that they should not turn their classes loose, because paired-reading time is very involving for both the children and the teacher—after all, this is teaching time. If the teacher has the class organized into pairs and those pairs are all reading to each other, the teacher needs to move among the pairs giving additional guidance and feedback. In one pair, the teacher might intervene by giving one of the partners some direction ("How well did Jimmy do? Should Jimmy read it again?"). In another case, he or she may explain the meaning of a word or help the children to decode a word that they find challenging. In still another, the teacher may listen to a child's reading to evaluate the appropriateness of the text placement. The point is that the teacher is actively listening and interacting with the children during fluency instruction time, and that kind of active involvement helps maintain classroom order as well as improve children's reading achievement.

As with any of the other components in the framework, the time organization can be flexible. What I mean by this is that the plan does not require block scheduling. It is not necessary to set aside 9:00–11:00 A.M. each day for reading instruction, with each component receiving 30 minutes of uninterrupted time in sequence. School days are more complex than that, and research does not support any particular organization over another. Some teachers like to have two 15-minute fluency periods rather than a single half-hour. Some prefer to use time during the afternoon for this rather than the morning. These are reasonable choices made by reasonable teachers.

Some teachers seek special materials for fluency teaching, usually opting for materials that are heavy on predictability and rhyme. There is no question that poetry can be great fun for fluency time (Shel Silverstein and Jack Prelutsky are especially popular poet choices). However, I recommend caution with regard to such choices and would relegate them to the "we read those occasionally" category. My reasoning is that the research on fluency was not conducted with such materials, and it is not enough that children become fluent with poetry—they must be able to read prose, with its very different rhythms and cadences, as well. A good deal of fluency practice can take place profitably using the same materials used for reading comprehension. There is one problem with this approach, however; the difficulty levels of books used to build comprehension have increased to such an extent that they may be too hard for some children to allow them the best fluency practice (Menton & Hiebert, 1999). Most authorities on reading encourage fluency practice at levels that are instructional (about 95% accuracy on a first reading), and most studies of fluency instruction used materials that were more controlled than some literature-based basals (National Reading

Panel, 2000). However, it is much easier to select appropriate supplementary materials for fluency practice that are nearer to student reading levels when students are working in pairs than when the teacher is doing a whole-class or larger group activity. There may be a benefit to having everyone think about the same ideas in a particular text, but there is no analogous benefit to having everyone practice fluency at exactly the same levels.

## **Integrating Instruction**

The discussion up to this point makes these aspects of literacy appear to be quite separate. The point of treating them separately in this way is to ensure that each receives adequate and appropriate instructional attention. However, that does not mean that there should be no connections among the parts within teaching. Imagine a morning of instruction in which a teacher has students explore the meanings of a list of words, then has them participate in a guided reading discussion of the meaning of a text, then has them practice fluency through paired reading of another text, and finally has the students writing or revising an essay. The word and text selections and activity choices could be quite good, as could the teacher's implementation of instruction. But relying upon such separate activities is not only unnecessary, it would clearly be inefficient and even confusing.

Why not focus on vocabulary words drawn from the same text that students are reading? This text could be used both for comprehension and fluency, and the students could even write about this text as well. Of course, there is not one singular way to make such combinations. If a text is particularly challenging for students, it might make sense to provide fluency practice first and then have them do the comprehension work (the fluency practice should make the text "easier" by clearing up some of the decoding challenges). Or perhaps it would be best to have the students focus on reading comprehension with a new text, followed by additional oral readings aimed at improving fluency (that should speed up student fluency progress, since they would have already read the text once). Similarly, vocabulary might be emphasized before or after a reading, or both before and after, and use of the vocabulary could be encouraged within the writing experience as well.

The point is that students need substantial work in each of these aspects of literacy, and that means devoting sufficient amounts of time to each with appropriate teacher guidance, scaffolding, and feedback. By focusing such thorough exploration on particular texts (rather than on disparate and disconnected lessons), the teacher increases the chances that students will come away with a deep understanding and facility of each of the texts that are used in reading lessons, and they should be able to do this with reasonable efficiency.

#### MONITORING LEARNING

Another requirement in the Chicago Reading Framework—beyond the standards for amount of instruction and content coverage—is that teachers should monitor student learning. Successful teaching depends not only on the use of research-proven instructional techniques but also on teacher awareness of how well the children are doing. Effective teachers pay attention to their children's progress and adjust their efforts accordingly (Shepard, 2000). This is important with word knowledge, comprehension, writing, and fluency, but, again, for this discussion, my examples emphasize fluency monitoring.

Testing can play an obvious role in monitoring student progress, and there are some fine ways to assess whether students can read a text fluently, including Diagnostic Indicators of Basic Early Literacy Skills (Good & Kaminski, 2002), running records (Clay, 1985), and informal reading inventories (Johnson, Kress, & Pikulski, 1987). However, even these informal measures, designed to be administered and readministered, cannot be given often enough to inform instruction as frequently as would be beneficial. By all means, use tests like these early in the year to determine where to start, and give them occasionally throughout the year to check on progress. But between the administrations of these tests, I encourage my teachers to continue to examine their students' fluency development less formally.

One simple way to do this is to maintain written records of students' oral reading performances obtained during teaching. I've always done this on index cards, one per child, but it is now possible to keep such records on a personal digital assistant or similar device if that is easier. However the records are maintained, the teacher listens to each child reading at least once each week (and, yes, you will want to hear some kids more often than that). This means the teacher needs to listen to five or six readers during each fluency period depending on the size of the group, but that isn't too difficult if there are 30–45 minutes per day devoted to fluency. Then the teacher simply makes a note of what the child was reading and how well he or she did.

How do we determine how fluently a child reads? There are really three options. One is to evaluate the accuracy of what a child reads. This means counting (or estimating, since this is an informal look) how many words the child read and how many errors were made. In a second-grade book, 100 words are equivalent to approximately 15 lines of text. I listen to a child read, keeping track of the mistakes. When 15 lines have been completed, I tally up the mistakes and make my calculations. If the youngster made five errors in about 15 lines, that would mean he or she read the text with 95% accuracy. That is good, but it could be better. By monitoring the accuracy of the reading, I can see whether the child is improving.

Another possibility is to consider how fast the child is reading. I'm not

talking about speed reading here, just that reading should move along like language. Hasbrouck and Tindal (1992) developed reading speed norms based on their testing of 7,000 children, and these can be useful as well. (Using these norms, I generally shoot for getting my first graders to read at 60 words correct per minute [wcpm] by the end of the school year, my second graders at 90 wcpm, and my third graders at 120 wcpm, with increases of about 10 words per year after that.) I might have a child read for 1 minute and then simply count the number of words read accurately (all the words read in 1 minute minus the errors). Then I record that speed and, again, keep track over several weeks to see whether the child's speed and accuracy are improving. Generally, the research suggests that such data are particularly reliable and valid when the students read for 2 or 3 minutes (Rasinski, 1990; Valencia et al., 2010).

Finally, I can look at how much the reading sounds like language. To assess this, the National Assessment of Educational Progress devised a monitoring rating system in which an oral reading performance is classified based on a 4-point scale or rubric, with 1 being dysfluent and 4 being fluent and expressive (Pinnell et al., 1995). A reading performance is rated a 1 (dysfluent) if it is so choppy that the child is reading word by word. The performance is rated a 2 if the child is reading in two- or three-word phrases but the pauses do not reflect the punctuation or the meaning. The reading is rated a 3 if the child is chunking into two-, three-, or four-word phrases and these reflect the meaning and punctuation (i.e., it is understandable as language). Finally, a reading is rated a 4 if it has the positive pausing characteristics noted for rating of 3 but is more expressive. The teacher can listen to an oral reading performance and rate it using this 4-point scale. The goal is to get children reading at a scale rating of 3 or 4.

By recording this kind of information once or twice per week, a teacher is at a great advantage for adjusting instruction and sharing helpful information with parents (if oral reading were monitored once per week, imagine how much information could be provided to parents on a report card or at conferences). If a child isn't making sufficient progress, this information should lead to some adjustment in instruction: an easier book; the use of an adult volunteer as a reading partner; additional fluency time at home, after school, or during another part of the school day; or greater attention to some aspect of fluency (e.g., building up sight vocabulary).

#### SUMMARY

Teachers who have not been teaching fluency, or have not devoted sufficient attention to it, by all means should strive to improve fluency instruction with children. However, fluency instruction works best when it is part of a

more complete regimen of reading and writing instruction. Teachers should strive to teach reading and writing for 2–3 hours per day, including instruction in word knowledge (recognition and meaning), fluency, comprehension, and writing. These components should receive roughly equal amounts of instructional attention, and should be taught using research-proven instructional approaches, such as those described by the National Reading Panel (Armbruster, Lehr, & Osborn, 2001). Finally, teachers need to monitor student progress toward the learning goals in fluency and the other components of reading as they teach. By bringing fluency into classroom reading programs in this way, teachers really can raise reading achievement.

#### REFERENCES

- Armbruster, B. B., Lehr, F., & Osborn, J. (2001). Put reading first: The research building blocks for teaching children to read. Jessup, MD: National Institute for Literacy.
- Barr, R., & Dreeben, R., with Wiratchai, N. (1983). *How schools work*. Chicago: University of Chicago Press.
- Baumann, J. F., Hoffman, J. V., Duffy-Hester, A. M., & Ro, J. M. (2000). The first R yesterday and today: U.S. elementary reading instruction practices reported by teachers and administrators. *Reading Research Quarterly*, 35, 338–377.
- Blachowicz, C. L. Z., & Fisher, P. (2000). Vocabulary instruction. In M. L. Kamil, P. Mosenthal, R. Barr, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. III, pp. 503–524). New York: Longman.
- Bond, G. L., & Dykstra, R. (1967). The cooperative research program in first-grade reading instruction. *Reading Research Quarterly*, 32, 345–427.
- Chomsky, C. (1975). When you still can't read in third grade: After decoding, what? In S. J. Samuels (Ed.), What research has to say about reading instruction (pp. 13–30). Newark, DE: International Reading Association.
- Clay, M. M. (1985). The early detection of reading difficulties (3rd ed.). Portsmouth, NH: Heinemann.
- Coslett, H. B. (2000). Acquired dyslexia. Seminars in Neurology, 20, 419-426.
- Doyle, W. (1983). Academic work. Review of Educational Research, 53, 159-199.
- Fielding, L., Kerr, N., & Rosier, P. (2007). *Annual growth, catch-up growth*. Kennewick, WA: New Foundation Press.
- Fisher, C. W., & Berliner, D. C. (1985). Perspectives on instructional time. New York: Longman.
- Fry, M. A., & Lagomarsino, L. (1982). Factors that influence reading: A developmental perspective. *School Psychology Review*, 11, 239–250.
- 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.
- Gamse, B. C., Jacob, R. T., Horst, M., Boulay, B., & Unlu, F. (2008). Reading First

- *impact study final report* (NCEE 2009-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Good, R. H., & Kaminski, R. A. (2002). DIBELS oral reading fluency passages for first through third grades (Technical Report No. 10). Eugene: University of Oregon.
- Hasbrouck, J. E., & Tindal, G. (1992). Curriculum based fluency norms for grades two through five. *Teaching Exceptional Children*, 24, 41–44.
- Johnson, M. S., Kress, R. A., & Pikulski, J. J. (1987). *Informal reading invento*ries. Newark, DE: International Reading Association.
- Kennedy, B. (2003). Hyperlexia profiles. Brain and Language, 84, 204–221.
- Menton, S., & Hiebert, E. H. (1999). Literature anthologies: The task for first-grade readers. Ann Arbor, MI: Center for the Improvement of Early Reading Achievement.
- Meyer, L. A., Linn, R. A., & Hastings, C. N. (1991). Teacher stability from morning to afternoon and from year to year. *American Educational Research Journal*, 28, 825–847.
- National Reading Panel. (2000). 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: National Institute of Child Health and Human Development.
- Perfetti, C. A., Finger, E., & Hogaboam, T. W. (1978). Sources of vocalization latency differences between skilled and less skilled readers. *Journal of Educational Psychology*, 70, 730–739.
- 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.
- Plaut, D. C. (1996). Relearning after damage in connectionist networks: Toward a theory of rehabilitation. *Brain and Language*, 52, 25–82.
- Pressley, M., Wharton-McDonald, R., Mistretta-Hapston, J., & Echevarria, M. (1998). Literacy instruction in 10 fourth and fifth grade classrooms in upstate New York. *Scientific Studies of Reading*, 2, 159–194.
- Raphael, T. E., & Wonnacott, C. A. (1985). Heightening fourth-grade students' sensitivity to sources of information for answering comprehension questions. *Reading Research Quarterly*, 20, 282–296.
- Rasinski, T. V. (1990). Investigating measures of reading fluency. *Educational Research Quarterly*, 14, 37–44.
- Roehler, L. R. (1992). Embracing the instructional complexities of reading instruction. In M. Pressley, K. R. Harris, & J. Guthrie (Eds.), *Promoting academic competence and literacy in school* (pp. 427–455). San Diego, CA: Academic Press.
- Shanahan, T. (2001). Improving reading education for low-income children. In G. Shiel & U. N. Dhálaigh (Eds.), *Reading matters: A fresh start* (pp. 157–165). Dublin: Reading Association of Ireland/National Reading Initiative.
- Shanahan, T. (2002). What research says: The promises and limitations of applying research to reading education. In A. E. Farstrup & S. J. Samuels (Eds.), What

- research has to say about reading instruction (3rd ed., pp. 8-24). Newark, DE: International Reading Association.
- Shanahan, T. (2004). *Elements of reading: Fluency*. Austin, TX: Harcourt Supplemental.
- Shanahan, T. (2005). Relations among oral language, reading, and writing development. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 171–184). New York: Guilford Press.
- Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, 78, 40–59.
- Shavelson, R. J., & Towne, L. (Eds.). (2002). Scientific research in education. Washington, DC: National Academy Press.
- Shepard, L. (2000). The role of assessment in a learning culture. *Educational Researcher*, 29(7), 4–14.
- Stallings, J., & Krasavage, E. M. (1986). Program implementation and student achievement in a four-year Madeline Hunter follow-through project. *Elementary School Journal*, 87, 117–138.
- Stanovich, K. E. (1981). Relationship between word decoding speed, general nameretrieval ability, and reading progress in first-grade children. *Journal of Educational Psychology*, 73, 809–815.
- U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. (2008). *Reading First implementation evaluation final report*. Washington, DC.
- Valencia, S. W., Smith, A. T., Reece, A. M., Li, M., Wixson, K. K., & Newman, H. (2010). Oral reading fluency assessment: Issues of construct, criterion, and consequential validity. *Reading Research Quarterly*, 45, 270–291.
- Walberg, H. J. (1986). Syntheses of research on teaching. In M. J. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 214–230). New York: Macmillan.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1990). What influences learning?: A content analysis of review literature. *Journal of Educational Research*, 84, 30–43.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research*, 63, 249–294.
- Young, A., & Bowers, P. G. (1995). Individual difference and text difficulty determinants of reading fluency and expressiveness. *Journal of Experimental Child Psychology*, 60, 428–454.
- Zutell, J., & Rasinski, T. (1986). Spelling ability and reading fluency. In J. A. Niles & V. Lalik (Eds.), 35th yearbook of the National Reading Conference (pp. 109–112). Rochester, NY: National Reading Conference.