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Reading Fluency Practice as Reading Enrichment in After-School Literacy Programming

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After-school programs (ASPs) are an ideal setting for improving reading skills in young readers. The extra hour in the ASP that elementary school children have after they complete their homework provides an excellent opportunity for after-school instructors to engage children in reading practice. Practice is the key to becoming a good reader, as it is in most of life's endeavors. Struggling readers generally do not enjoy reading practice for its own sake. They find it difficult—who likes to practice what they are not particularly good at? Children have often tallied up a great number of failure experiences related to reading by the time the after-school professionals see them. Left to their own devices, children might avoid reading practice, which is perfectly understandable. Structuring reading practice so that young readers have the supports they need to be successful is essential for obtaining meaningful improvements in children's developing skills. ASPs can help with this.

The purpose of this chapter is to provide a general account of the research necessary for understanding the development of reading, particularly the development of reading fluency. Having a basic understanding of how reading develops will help after-school professionals organize their own programs have so that they have a discernible impact on their own students' reading skills. This knowledge can

guide them in making informed instructional decisions during a reading enrichment experience.

In high-poverty settings, such as the ones in which we work, one common problem is a lack of reading fluency skills, particularly in grades 2–5. (Hardly any child is particularly fluent prior to grade 2.) Becoming a fluent reader is an important academic goal for being able to read well, and most children will benefit from targeting this basic skill. So, implementing instructional strategies related to reading fluency is ideal for ASPs hoping to enrich and improve children's reading skills. But before discussing the research related to reading fluency, I briefly summarize the development of reading so that after-school instructors can better pinpoint the needs of individual children under their care. Then I discuss what reading fluency is and the research related to the importance of fluent reading. Finally, the practices that research shows are effective for promoting fluent reading among elementary school children are described.

Reading is developmentally organized. That is, some basic skills need to have a certain degree of proficiency before others can really take off. These basic skills form the foundation on which other skills depend.

Skills directly related to linguistic comprehension depend heavily on the characteristics of the linguistic environment in which children are raised. Linguistic skills accrue cumulatively from the moment of birth. The development of these skills tends to have a very long trajectory, essentially growing throughout a person's lifetime.

Other skills (generally those related to recognizing written words) depend more heavily on direct instruction from teachers and adults. These skills tend to require consistent practice to be mastered well. Most children receive these lessons from their teachers during formal reading instruction in school. In what follows, we provide a brief, albeit simplified, version of the developmental skills that need to be established for learning to read well.

Emergent Literacy

Emergent literacy is the term that educators give to the knowledge and set of skills that young children bring with them about reading and writing when they first enter school. We like to think of these emergent literacy skills as being analogous to the way a bridge is constructed. Emergent literacy skills serve as the bedrock into which most bridges (i.e., reading skills) are built. If the bridge's abutments are placed on shifting sand instead of bedrock, the bridge might not be strong enough to support heavy traffic over the long haul (i.e., complex reading) and may collapse. We can add cantilevers and trusses (i.e., phonics, reading strategies), but ultimately the bridge will not work well enough to do the difficult job it needs to do (comprehension) without the bedrock.

Print Knowledge

The availability of and exposure to print materials prior to starting school is one of the environmentally-based issues that affect children's early learning about literacy. Some children come from homes rich in books, magazines, and newspapers. Other children, often from low-income families, come from homes where the preponderance of text they see is the *environmental print* found on cereal boxes, item labels, shopping lists, and so forth, not books. These forms of the printed word can be important sources of emergent literacy learning if adults point out the relevance of it for literacy (Purcell-Gates, 1996). An example of environmental print is shown in Figure 8.1. An alert after-school instructor (or parent) can point out how the *C, a,* and *o* can be seen in these two stylized Coca-Cola and Cheerios labels.

Approximately two-thirds of low-income families do not own a single children's book (Binkley & Williams, 1996). In poorer neighborhoods, few stores carry children's books, and they are often sold in counterintuitive places, such as drugstores, grocery stores, and Dollar-type stores where families might not think to look for them (Neuman & Celano, 2001). As a result, some children in these families might have limited experience with reading materials, compared to those children who have a vast array of experiences with children's books. The result is that some children may start school not yet understanding such emergent literacy basics, such as where the cover of the book is, what an author is, how to hold a book the right way, or how we move our fingers from left to right while reading (Clay, 1979).

A cynic might ask, "Why don't these families just take their children to the library?" Public libraries are not a direct replacement for having a home library filled with books. Library branches in low-income neighborhoods generally contain fewer titles overall, and often have less working-family friendly hours compared to those in more affluent neighborhoods (Krashen, 1995). Fines levied for

FIGURE 8.1. Adults can point out how the words *Coca-Cola* and *Cheerios* each have the letters *C* and *o*.

late book returns are discouraging for young parents, too, who fear that their pre-schooler might mangle or lose the library books. Replacement library-bound copies cost more than twice that of regular paperback versions, so these fears are real.

ASPs in high-poverty neighborhoods can help with this print accessibility issue by participating in book give-away programs, such as the Dolly Parton Imagination Library (Ridzi, Sylvia, & Singh, 2014). Every children's book that can be sent home makes a difference, and ASPs also can help parents recognize the need for bedtime reading by participating in book giveaway programs and sending home notes encouraging parents to read to their children (Reardon, Waldfogel, & Bassock, 2016).

Linguistic Skills

Children's oral language skills are very foundational for reading. These language skills arise from the opportunities to participate in conversations with the adults and others around them. You can predict how many words young children know by tracking the quality and quantity of language directed at the children (Hart & Risley, 2003). Some children hear their parents describe the world around them in an extensive color commentary. Others mainly hear adults issuing orders (e.g., "Please eat your dinner"; "Don't interrupt"; "Stop running through the house"). Some children have great parents who generally do not talk much.

The resulting variation in the language that children hear is astounding. By the time they are just barely preschoolers, some children have heard massive amounts of language compared to others, and their resulting language growth differences are extensive (Mayor & Plunkett, 2011). Both in-school programs and ASPs can provide verbal stimulation that helps children catch up (Biemiller & Slonim, 2001) and can encourage children to describe their thoughts, actions, and feelings in language.

Language skills are vital because they help children comprehend what they read (Ouellette, 2006). Struggling readers often have problems with vocabulary and will stumble upon words they do not know. After-school instructors can observe many young readers sound a word out right, only to shrug their shoulders because they believed that they had misread it. If children do not know the meaning of several words on a page, they will have trouble understanding the text in its entirety. Instructors can help when the situation arises by providing a quick definition for the word using words the children are likely to know—for example, "*Jig?* Oh, that's a dance where you dance with your hands on your waist and kick your feet." They can use what we like to call dime words rather than nickel words. Table 8.1 features some examples of what we mean. Children's vocabularies grow in measurable ways when they have teachers who linguistically recast simple sentences into complex ones (Ruston & Schwanenflugel, 2010).

As educators, we are always asked about whether there is a particular set

of words that children should learn. This is not the best way to think about the problem. Instead, it is better to let vocabulary learning occur spontaneously as a natural part of conversation or as children encounter words they do not know.

Furthermore, the more words children know, the more likely they are to have developed precise phonological (language sound) information (Metsala, 1997) that they can use to help them learn to read. For example, children who know the words *fin, tin,* and *bin* need to mentally distinguish the initial sounds of these words. Being able to distinguish and manipulate these language sounds in your head is called *phonological awareness,* a key skill for learning to read.

Alphabet and Phoneme Knowledge

Most children come are able to recite the alphabet before starting school (i.e., "ABC Song"). Fewer preschoolers are able to visually recognize and name letters presented randomly to them. Children who know the names of even 10 letters by the end of preschool are less likely to have reading issues later (Piasta, Petscher, & Justice, 2012).

Luckily most letter names in English have the letter sounds somewhere in their names (except for the uncooperative letters *h, w,* and *y*), so knowing letter names supports the learning of letter sounds, too, for example, *B* (the letter) → *bee* (the letter name) → /b/ *(*the letter phoneme "buh"). Knowing letter sounds is essential to learning how to read, and most children will have learned most of their letter sounds by the end of kindergarten.

Most ASPs serving older children will not have to engage in direct instruction of these basics. Struggling readers will still need extra help learning to identify the

TABLE 8.1. Examples of How After-School Staff Can Expand on Children's Vocabulary by Using Dime Words Rather Than Nickel Words

Child says (nickel word) . . .	After-school instructor responds (dime word) . . .
"Larger!"	"Shall I make it more *gigantic*, even more *humungous*?"
"It go away!"	"It *floated* away! It just *drifted* away!"
"No more."	"Is that *sufficient* for you?"
"I want some!"	"You want some *sprinkles*? How about putting these chocolate *jimmies* on your ice cream?"
"Gimme some sparkles, please!"	"Oh, you want some *sequins*? Some *glitter*? Do you like the way they *shimmer* in the light?"
"I want a pear!"	"Do you have a *hankering* for a *Bartlett* pear right now?"
"I dress in Halloween."	"Oh, you put on a Halloween *costume*? Is it a special *occasion*?"

phonemes of language, particularly if they have been identified as needing special services in reading. All after-school personnel from the "snack lady" to the physical activity director can practice recasting children's simpler language into more complex forms to improve children's vocabulary and oral language skills.

Learning to Read Words

Reading words requires that a child to be able to map the spellings of a word onto its sounds (using what colloquially is often called *phonics*). In total, there are around 44 basic sounds in English, called *phonemes,* but there are often many different spellings for a particular phoneme (Denes, 1963). Sometimes individual sounds are represented by groups of letters such as *ch, ck, ng, ea, ee,* and *wh.* The /i/ sound (as well as many other sounds) as in *beat* has a number of ways it can be spelled, and can be represented by not only a single –*e,* as in *he* and *be,* but also by groups of letters, such as -*ee* as in *m<u>ee</u>t,* -*ea* as in *s<u>ea</u>t,* -*ei* as in *w<u>ei</u>rd,* -*ie* as in *p<u>ie</u>ce,* -*e__e* as in *h<u>e</u>re,* and -*y* as in *lovel<u>y</u>.* When children can figure out how to map these groups of letters onto sounds, they can try to match the sounds to a word in their vocabulary that fits. Children have to learn to recognize words that are exceptions to basic phonics rules, too, such as the words *said, are,* and *listen.* Luckily, about half the words in English are spelled in a regular manner and another third are just a single phoneme off from being regular (Hanna, Hanna, Hodges, & Rudolph, 1966). That means children are likely to come up with a good guess as to what a word is likely to be by translating the spelling of most words into a series of sounds.

Ehri (1991) has described the general phases children appear to go through while learning to read words. First, early in reading, children may read words using a *prealphabetic* strategy because they do not yet have full command of the alphabet and might use some highly distinctive letters in a word to make a guess. For example, they might recognize the tall double-*l,* and guess the written names *Billy* or *Molly.*

When they have better command of the alphabet, they can begin to distinguish more links between letters and sounds, and may use just a few of a word's letters (and maybe a picture too) to make a guess at the word. Ehri calls this phase the *partial alphabetic phase.* In our experience, struggling readers can be stuck in this phase for quite a while.

In the next phase, which Ehri calls the *full alphabetic phase,* children recognize the need to learn all the rules that connect letters and groups of letters to particular sounds and syllable pronunciations. Reading is slow and plodding during this phase because there are a lot of rules to learn. In the last phase, in the *consolidated alphabetic phase,* children start to read using units constructed of

larger groups of letters that occur together often, such as *-ed, -ing, -tion,* and *-ly.* With practice, this helps them read words more quickly and accurately.

In after-school reading enrichment instruction for second- and third-grade children, it is not unusual to have children in all four of the latter stages of learning to read words. After-school personnel can structure opportunities to practice these skills by having children read aloud. During these read-alouds, they can assist children as needed in recognizing common spelling patterns and phonics rules. Once an instructor recognizes the patterns present in a young child's oral reading, he or she can consider the special kinds of supports that a particular child may need in reading words. Some children might still need to learn some phonics rules, while others might just need the supported reading practice typical of the next phase.

Reading Fluency

Fluent reading is generally defined as the reading of real text that is quick, accurate, and expressive. Fluent reading supports good comprehension, although it does not guarantee it. Dysfluent reading, or reading that is choppy, monotone, slow, and inaccurate, appears to outright interfere with good comprehension. Children may be able to read grade-appropriate texts fluently, but not read difficult, complex, or advanced texts. If children cannot read grade-appropriate texts fluently, which is not uncommon in many after-school settings, then reading fluency practice is necessary.

What happens cognitively as children begin to read fluently? First, they read by recognizing larger units within words. That is, instead of reading words sequentially, letter by letter, specific common patterns and even whole words are recognized as a single unit. For example, count the number of *t*'s in the following bit of text as quickly as you can.

> When Wesley was a child just learning to read, he became an avid reader by reading the *Magic Treehouse* (Osborne, 2001) books. He really enjoyed traveling mentally to places like the Arctic or Africa to see all the animals that didn't exist in his neighborhood.

How many *t*'s were there in this short sequence? There were 15 of them. If you missed a few, you probably missed the *t*'s in the words *the, that, to,* and perhaps *just.* That is because a fluent reader does not read these words by reading letters from left to right, but instead sees them more-or-less as a single unit (Cunningham, Healy, Kanengiser, Chizzick, & Willits, 1988).

Fluent readers pronounce words quickly and accurately (Adams, 1990), rather than hesitantly and slowly. The speed with which words are read distinguishes good from poor readers pretty much throughout life, but there is considerable

progress in how quickly children can read words during the early elementary school years. The after-school instructor can readily discern whether children are fluent by listening to them read aloud. If there are lots of hesitations, slow reading of words, misread or reread words, or words read with emphasis on the wrong syllable (e.g., _a_bility), even when reading texts at a child's grade level, then the literacy professional can conclude that the child needs some fluency practice.

Another aspect of reading fluency is _word reading autonomy_. That is, when text is presented, fluent children cannot help but read print even when they would rather not. For example, it is impossible for you as a fluent reader to follow this command:

Do not read this message!

As children become fluent readers, they too cannot help but read print. This word reading autonomy begins fairly early in the process of learning to read fluently, as soon as children begin to understand how speech sounds relate to letter patterns (Schwanenflugel, Morris, Kuhn, Strauss, & Sieczko, 2008). If after-school instructors see children voluntarily pointing at and reading the text all around them as they walk through the school hallways, it is likely that they have developed some degree of word reading autonomy.

Finally, and most important, fluent readers are _expressive_ when they read. That is, fluent readers generally use intonation that largely conveys the message of the text. Let's consider this short passage below. You might want to read this aloud to yourself.

Every day Frog and Toad played together in the forest. Eventually, the increase in the distance they wandered led them far away from their homes. One day, they became quite lost and ran into two trailheads that began right next to each other. Not knowing what to do, they considered both. Toad asked, "Do you think we should follow one of these trails?" Pointing downhill, Frog answered, "Let's try that," and ran ahead.

Toad reasonably feared they might really get lost, so he worriedly asked Frog to come back. But Frog paid no attention. Toad repeated, "Please come back!" Again, there was no response, so Toad began to follow him. To increase his speed to catch up, Toad hopped after him with his biggest hops.

Expressive readers reading this aloud might pause briefly, but changes in pitch would mark the end of every sentence. Certainly, unnatural pauses occurring randomly in midsentence would be very rare. Expressive readers might or might not pause at all at commas, but if they did, that is where they would do it. They might read everything within quotation marks with a raised pitch compared to the rest of the passage. There would be a distinction in loudness and pitch between the first instance of c_ome back_ and the one two sentences later. When reading the question,

their voice would raise in pitch at the end. When focusing on a particular item (as in . . . *Let's try that*), they might emphasize *that*. Finally, children who read with expression would read all words with stress placed on the correct syllable. For example, they would emphasize the first syllable of the noun *increase,* while placing stress on the second syllable of the verb *increase* several sentences later.

Over the past few years, we have done a lot of research on the development of *reading prosody,* or reading expression. We have examined the oral reading of children by studying a spectrogram of their readings. A *spectrogram* is a visual representation of speech, an audio map of sorts that depicts some basic features of children's speech. These spectrograms show us visually whether the child has raised his or her pitch, whether or not he or she has gotten louder, and whether he or she has paused anywhere during the reading. We often look at spectrograms of children's oral readings of the same types of texts that teachers use to examine their oral reading fluency. Figure 8.2 shows an example of a spectrogram of a fluent reader reading the sentence, "Would you like to see my garden?"

Note that the content words *you, like, see,* and *garden* are all read more loudly than the function words *to* and *my.* The first syllable of the word *garden* is spoken more loudly than the second syllable, indicating that the child has emphasized the correct syllable. The child's pitch is raised at the end of this yes–no question, as it should be.

From our research, we have learned a great deal about the oral reading prosody of less fluent readers: Children who are less fluent tend to pause a lot while reading. They make unnaturally long pauses between sentences. They pause midsentence, often before difficult words, and even where there is no punctuation at all. These pauses are long and intermittent, varying in ways that do not match the text. They give their reading an unevenness that makes it difficult for the listener, let alone the reader, to understand what is being read. This type of pausing
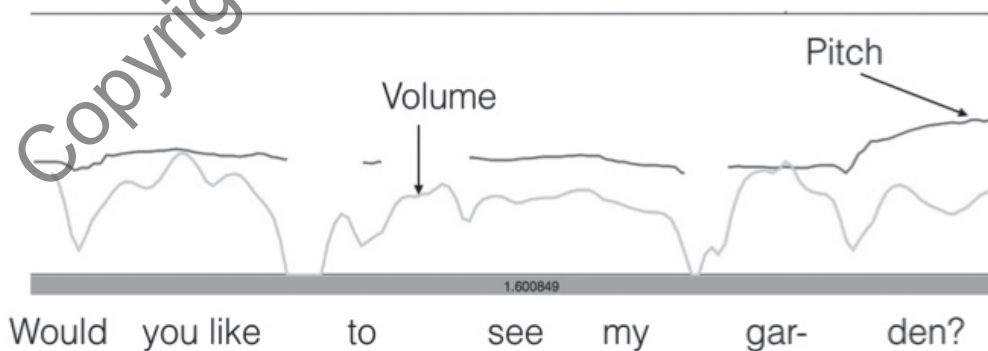

FIGURE 8.2. Example of pitch and volume tracks of a fluent third-grader reading "Would you like to see my garden?"

is sometimes called *pausal intrusion* by reading educators because these pauses intrude on our ability to comprehend the sentence.

The reading of less-fluent readers can sound rather monotonous and flat. In particular, the pitch changes at the ends of basic sentences mark an important reading prosody boundary. Flattened pitch there sounds odd. Indeed, when we measured pitch changes from our spectrograms, we too could see the monotone pattern. The pitch declines at the ends of sentences for less-fluent readers were not as steep as those of fluent readers (Schwanenflugel, Hamilton, Kuhn, Wisenbaker, & Stahl, 2004). Fluent readers read with pitch patterns much like the adults around them, but less fluent readers did not. Less-fluent readers also showed generally less variation in pitch across a segment of text than fluent readers did (Benjamin & Schwanenflugel, 2010).

We have found that less-fluent readers' pitch changes often do not match the message of the sentence (Schwanenflugel, Westmoreland, & Benjamin, 2016). We usually raise our pitch when we are directly quoting someone or when we are drawing people's attention to something, as in "Look at this!" A less-fluent reader might say all the words in this short sentence in an equally loud way. Less-fluent readers also make less distinction between the syllables in a word in both pitch change and loudness (Schwanenflugel & Benjamin, 2016). Think of how the word *activities* might sound when read robotically, and you can understand what is meant here.

To summarize, the reading prosody of fluent readers should sound fairly similar to ordinary speech in terms of changes in pitch, loudness, and pauses within the text. Of course, only professionals, such as newscasters or actors, can read in a way that really disguises the fact that they are reading, so we do not wish to overexaggerate the similarity of fluent reading to spontaneous speech. But, after-school instructions should be able to identify children who have issues with reading expression by determining that the children's reading sounds unusually awkward, flat, and choppy.

Reading Fluency for Good Comprehension

The main reason that after-school literacy instructors should care about whether children are reading fluently is that lack of fluency hinders children's ability to understand what they are reading. Particularly in early elementary school, the correlation between reading fluency and reading comprehension is incredibly high, as much as .85 in some studies (Reschly, Busch, Betts, Deno, & Long, 2009). This correlation means that most children of this age who are able to read grade-level texts fluently generally understand what they have read. Most children who do not read fluently are experiencing comprehension difficulties. The after-school staff can measure reading fluency by measuring children's reading rate, which can serve

as a pretty good indicator of children's reading comprehension skills. But if they also listen for children's reading prosody, they get an even better estimate of children's ability to understand what they are reading (Schwanenflugel & Benjamin, 2016).

Fluency alone becomes a somewhat weaker indicator of reading skills as children approach the end of elementary school (Schwanenflugel & Kuhn, 2016). This occurs primarily because the difficulty of texts that children are being asked to read as they graduate into middle school require skills other than fluency, such as a strong vocabulary, good inference skills, and a substantial prior knowledge base from which to draw on.

There will be a subset of older elementary school children (approximately 10–15%) who can read fluently but not have much reading comprehension (Meisinger, Bradley, Schwanenflugel, & Kuhn, 2009). This type of reading is sometimes called *word calling*, a trend that is very noticeable among some English learners. Approximately half of English learners will be able to read a text with the appropriate degree of fluency, yet not really understand it (Quirk & Beem, 2012). After-school literacy instructors need to be alert for this possible pattern among this subgroup of children, in particular.

The reduced relationship between fluency and comprehension as children finish elementary school does not mean that fluency practice is no longer relevant. Fluency is thought to be a fundamental bridge to comprehension. Indeed, disfluent reading is a barrier to comprehension for many adolescent struggling readers, and even for some adult readers (Brasseur-Hock, Hock, Kieffer, Biancarosa & Deshler, 2011). Reading fluency skills remain a strong proxy for the general status of a child's reading skills. Thus, after-school staff can make a pretty good guess as to children's general reading skills merely by listening to them read aloud.

Transitioning from Oral Reading to Silent Reading

So far, we have emphasized the importance of *oral* reading fluency during elementary school. At some point, however, children will be fluent enough to prefer silent reading over oral reading. Indeed, the reliance on oral reading is a transitional period until children become fluent enough to prefer silent reading.

There are many theories as to why children need this transitional period of reading aloud prior to reading silently. From a sociocultural perspective (Prior et al., 2011), children transition to reading silently in the following way: First, they learn about books by being read to on their guardians' laps as infants and toddlers. Then, when they begin the process of learning to read, they read aloud to those same guardians who can provide word recognition and comprehension assistance. Then children go through a period where they find it more comfortable to read

aloud to themselves. Finally, they move to reading silently to themselves, as reading itself becomes internalized.

From a cognitive-processing perspective, the reason that children seem to perform better with oral reading than silent reading is that they rely on the auditory feedback that they get from listening to themselves read. Indeed, even adults have been shown to use this auditory feedback even when listening to themselves speaking. It helps them realize that they said the wrong word, for instance. Basically, this feedback helps to specify the message of the text (Lind, Hall, Breidegard, Balkenius, & Johansson, 2014). This auditory feedback may also amplify the little voice in their heads that can be heard when reflecting on the process of reading something difficult silently to oneself. Further, this auditory feedback that children get from listening to themselves read keeps the information in their working memories until they have had a chance to fully process the message of the text. It helps them to attend better, so that they read all the words in a text and fully consider its meaning.

Comprehension is superior from reading aloud than from silent reading from first through fifth grades, although this trend diminishes by seventh grade (Prior et al., 2011). The issues we have raised here might help to account for the fact that the practice of including 10–20 minutes of sustained silent reading present in so many programs has been shown to have limited effectiveness (National Reading Panel & National Institute of Child Health and Human Development, 2000). Young children may simply need concerted time to read aloud with appropriate supports.

Certainly, older readers attending ASPs who already have excellent reading skills might not need the focused attention on oral reading that their peers need. Their comprehension following silent reading might even be superior to that following oral reading. For these high-performing children, it might be just as beneficial to set them up in a quiet corner in the after-school area where they can read to themselves. Making sure that they are held accountable for the reading through activities such as journaling or answering comprehension questions will keep them honest about reading books for meaning.

Evidence-Based Instruction of Reading Fluency

Most effective fluency instruction is structured to find ways to ensure that children receive enough scaffolded reading practice to obtain automaticity and fluent oral reading. The word *scaffolding* in education refers to the various ways that teachers help children to reach an educational goal by providing just the right level of assistance, but not too much. This assistance is gradually removed as children's skill level increases so they can complete the task by themselves. For our purposes, the goal of these practices is for the children to be able to read a passage fluently and expressively. The practices described in the next sections are classroom strategies

that have been identified by researchers as being effective for improving reading fluency in young children.

Fluency–Oriented Reading Instruction

The most common instructional practice used to improve reading fluency is *repeated reading* (Kuhn & Woo, 2008). Repeated reading is the centerpiece of Fluency-Oriented Reading Instruction (FORI). In FORI, children are given a particular text to practice reading aloud each week. They will be asked to read this text over and over again, anywhere from 3 to 15 times in a single week. For example, Stahl and Heubach (2005) conducted a study using FORI in which a weekly lesson plan used repeated reading to promote fluency in settings where the majority of children were not reading on grade level. In the FORI strategy, children read the same grade-level basal reader text aloud every single day in various ways and again at home for homework. For many children, grade-level texts are fairly out of reach, and they struggle mightily with them. In the current context of the Common Core State Standards, there is an emphasis on increasing the text complexity that children are exposed to within the curriculum, so fluency practice is essential. FORI requires using complex texts that are somewhat out of reach for the children, so it is in line with these current standards.

The FORI lesson plan varies throughout the week. At the beginning of the week, repeated reading practice is carried out with the teacher reading a text aloud and expressively and the children following along silently in their books. Teachers circulate around the room to ensure that the children are on the right page and perhaps pointing to words as they are read.

The next day, teachers carry out an echo reading of the same text, as they read a few sentences aloud, while the children echo these segments back until the text is completed. Ideally, teachers will read enough text, generally two or three sentences, to ensure that the children will have to follow along in the text rather than just retrieve the segment from working memory.

The following day, teachers will conduct a whole-classroom choral reading of the same text, in which the teacher and children read the text aloud together in unison. To keep the lesson interesting, teachers can mix it up by having the girls, and then the boys, read aloud together. Or they could do a highly expressive reading followed by a not-so-expressive one. Or they could divide children into teams, having the red team read a segment aloud, followed by a blue team read-aloud, and so forth. Again, throughout, the teacher would be circulating around the room to ensure that there are no social loafers who are merely sitting around, not reading.

On the third day teachers will carry out partner reading. This is a strategy in which children work in pairs such that they take turns reading pages of the text, usually with one taking the left page and the other taking the right. It is also ideal if children can help their partners read the text, making small corrections

from time to time, so generally a teacher might pair a child with better skills with one that has poorer skills. It is also ideal if the children that are paired get along together personally, so that they will be courteous while providing reading feedback.

The last day of the week, teachers will conclude with an activity involving the book that requires children to refer back to the book to enrich their understanding or memory of it. The activity could be as simple as drawing a picture of the book's main characters or solving some sort of puzzle related to the book. Or it could be something as complex as addressing a writing prompt or project related to the topic of the book. It can be a jeopardy type of game, as well.

Fundamentally then, the main strategy behind FORI is to have children engage in many repeated readings of the passage. The goal of repeated reading practice is the development of automaticity for words in the practiced texts, along with the belief that these repeated readings will eventually transfer to the reading of unpracticed materials over time. Several studies have found FORI to be effective in promoting general reading fluency among struggling second-grade readers (Stahl & Heubach, 2005; Morrow, Kuhn, & Schwanenflugel, 2006).

Wide Fluency–Oriented Reading Practice

Wide FORI is a variant of basic FORI, in that it features some repeated reading practice, but it provides a greater variety of experiences with text. In the Wide FORI approach, the number of texts that children read each week is expanded from one to two or three, depending on their length (Kuhn, 2005). This type of program is sometimes just called *wide reading*.

The rationale in Wide FORI for using a variety of texts is based on three facts. First, most text we read is highly repetitive, so fluency with a particular text can be accrued more quickly than we originally thought for most kids. We now know that practicing a given word for a few times is probably enough for most children to begin to recognize the word automatically. We also know that approximately 100 words comprise about half of the running words in elementary school texts (Adams, 1990). So, practice on one text is much like practice on another. Second, repeatedly reading the same text over and over can be rather boring, potentially damaging reading motivation. If there is no particular need for the repetition, then it probably should be avoided. Finally, children can benefit from learning about a greater variety of ideas and develop a more diverse vocabulary if they are flooded with different books. Ultimately, this wider exposure might be as important to future comprehension as fluency is.

The Wide FORI approach follows the same basic fluency practices of Stahl and Heubach's (2005) basic FORI (echo, choral, and partner reading), but children read three passages in a week rather than the same one over and over again. Children receive new texts on Mondays, Wednesdays, and Fridays, in a typical week.

Whether they are fully fluent with the text or not, they move on to the next one. This means that children might complete from one to four readings of any particular passage. Full mastery of the text is not emphasized.

Several studies comparing basic FORI and Wide FORI approaches have found a slight advantage for Wide FORI over basic FORI on fluency development (Kuhn, 2005; Kuhn et al., 2006; Schwanenflugel et al., 2009). There also may be an advantage for reading comprehension and reading motivation developed as an outgrowth of Wide FORI practice (Schwanenflugel et al., 2009). This makes sense given the broader vocabulary and variety of ideas that the children have been exposed to with the Wide FORI approach. For this reason, the Wide FORI approach was used in our own ASP as outlined in Chapter 10.

Readers' Theater

Like basic and Wide FORI, Readers' Theater (Martinez, Roser, & Strecker, 1999) is another fluency-oriented program that promotes fluency through oral reading practice and repetition. In Readers' Theater, students read plays created for the program that emphasize text written at various reading levels. Teachers choose a script to use in their classroom that will be enacted for the week. Children are assigned parts, and the scripts are read repeatedly until children are fluent with them.

One advantage of Readers' Theater is that it provides a reason for all the repeated reading that goes on in the classroom. Because children are engaging in a performance of sorts, they perform while reading their books. Expressive reading is encouraged. Thus, this program has many of the same elements of basic and Wide FORI in that it emphasizes development of automaticity, accuracy, and good reading expression.

Many of the plays used in the program are adapted from popular children's books. Performances with fancy costumes and line memorization are not necessary or, perhaps, even desirable. (Lots of attention to these ancillary features can take away from the overall goal of increasing reading practice.) However, the plays can be carried out as elaborately or as simply as the teacher or children might want. In fact, often teachers using this approach will have their students give performances for other classes in the school. More simply, groups of children will perform for their peers within the classroom. This program can be adapted by giving older children writing activities that involve creating original plays from their favorite books. In the after-school setting, instructors might set up the goal of using the end of the day on Fridays as time to have family engagement activities, where families can come and watch children read in pared-down mini-performances.

Although most studies of Readers' Theater lack control groups, second-grade

children in one study made more progress in reading fluency over the course of the school year than might be expected for typical second graders (Young & Rasinski, 2009). Another study of older elementary school children found improvements in fluency mainly in reading expression (Clark, Morrison, & Wilcox, 2009). Our best guess is that the program is likely to be effective in improving at least some aspects of children's fluency because it shares many features of the other programs previously described.

Choosing a Fluency Program That Works for You

Regardless of the reading fluency approach that is chosen, the most important aspect of fluency practice is scaffolded oral reading practice, that is, practice that ensures that children receive the assistance they need to read the text correctly and that promotes expressive reading. Improvements in reading fluency using scaffolded practice take time. Some research estimates that a minimum of 20 minutes of oral reading, and preferably as many as 30 minutes, per day is needed to make meaningful gains (Kuhn & Woo, 2008). My belief is that basic FORI and Readers' Theater strategies may not incorporate enough practice, generally. In basic FORI, especially if the texts are not long enough, by the end of the week children can read the texts very quickly (usually in 5 minutes or so), and the teachers, not seeing a need for the additional practice, move on to other lessons (Schwanenflugel et al., 2009). The drawback of Readers' Theater is that children spend only 5–10 minutes on concerted oral reading practice according to estimates obtained from available studies. Even then, only part of that time is spent reading aloud by a given child, who only reads his or her part.

None of these problems are insurmountable, however, and all can be dealt with by making some minor changes. Both basic FORI and Readers' Theater can use more complex and longer texts as one solution. In the case of Readers' Theater, reassigning parts as children become fluent with the texts seems to be in order. Teachers can choose scripts that contain a substantial amount of oral reading for each child. However, because of the issues with these fluency approaches, we opted to use the Wide FORI approach for which children are given ample time for oral reading practice extended over a wide variety of complex texts.

We have not discussed reading comprehension in this chapter very much, other than to discuss how fluency provides a bridge to good comprehension. Clearly, a reading lesson that does not also focus on comprehension is missing the key point of reading. Comprehension practices can and should be intermingled with fluency-oriented practices. In Chapter 9, we describe how we have integrated content-oriented reading comprehension instruction within fluency instructions in the PAL reading enrichment program (see also K. Stahl, 2008).

The truth is that American children do not spend nearly enough time reading

during the school day. Oddly, on average, only 18 minutes out of the standard 90-minute literacy block is spent in the actual reading of text (Brenner, Hiebert, & Thompkins, 2009). Most likely, only a few of these 18 minutes are actually spent on the oral reading practice. Regardless, good ASPs can do much to increase the amount of time that children spend engaged active oral reading of text.

Determining Whether Reading
Fluency Practice Is Making a Difference

How can after-school literacy instructors determine whether their literacy practices are making a difference in accelerating young children's reading fluency? After-school staff generally do not have the resources or assessment skill levels to conduct a formal assessment of children's reading skills. So, all assessments should be considered informal and might be used mainly for determining whether there is a subset of children who do not seem to be benefitting from the program or to serve as feedback with regard to the general effectiveness of the program. Box 8.1 outlines a set of procedures that after-school staff can use to basically determine whether children are making progress in reading fluency.

After-school staff should assess children's reading fluency at least three times a year, at the beginning of the program, in the winter, and then again at the end of the program. If there is money available, the after-school coordinator can sign up for services such as AIMSweb (*https://aimsweb.pearson.com*), which provides fluency assessments designed for children at various grade levels. Alternatively, he or she can use the results of assessments provided by the school with permission from the child's parent. Or assessments of fluency can be conducted by selecting a grade-level text from informal inventories, such as ones from the *Qualitative Reading Inventory* (Caldwell & Leslie, 2009) or *Developmental Literacy Inventory* (Temple, Crawford, & Gillet, 2008). At its most basic, assessments should involve the staff having the children read the passage aloud, while they make note of reading errors and time the oral reading. Box 8.1 describes how errors and words correct per minute are determined. Recordings of these oral readings can be helpful for going back later to count reading errors and measuring changes in children's reading expression over time. Expression can be measured using the scale presented in Box 8.1.

There are also informal approaches the after-school staff can use for making teaching decisions in the moment:

1. *Listen to the basic fluency that children exhibit while they are reading aloud.* Instructors can ask themselves: Are the children able to read all the words in the text? Are they reading relatively quickly and accurately? If so, instructors

BOX 8.1. INFORMAL ASSESSMENT OF READING FLUENCY

Words Correct per Minute

Determining words correct per minute (WCPM) is a basic assessment of reading fluency. The tester should follow directions provided by the inventory for calculating WCPM or select the first minute of the reading and subtract reading errors from the number of words in the passage up to that point. *Reading errors* include inserting or omitting a word, reversing two words, skipping a line, mispronouncing or being unable to read a word in 3 seconds. The table below presents the 50th percentile (average) for each grade for WCPM as described by Hasbrouck and Tindal (2006).

Grade	Fall	Winter	Spring
2	51	72	89
3	71	92	107
4	94	112	123
5	110	127	139

Oral Reading Expression

The tester can also evaluate *oral reading expression*. We prefer the *Comprehensive Oral Reading Fluency Scale* (Benjamin et al., 2013, p. 13) because its descriptors were derived from the spectrographic information obtained from the readings of fluent and less-fluent children. The scale has two 4-point subscales, *intonation* and *natural pausing.* The endpoints of the subscales are included below.

Intonation Subscale

4 Rating (i.e., fluent)—Makes noticeable pitch variations throughout to communicate meaning; makes appropriate and consistent end of sentence pitch changes. One or two exceptions may exist.

1 Rating (i.e., disfluent)—Reads with flat or unnatural intonation throughout; does not make sentence boundaries with distinct pitch changes except occasionally.

Natural Pausing Subscale

4 Rating (i.e., fluent)—Pauses may be used to convey meaning; between-sentence pauses are short, but natural. Unexpected pauses occur < 1 per sentence on average.

1 Rating (i.e., disfluent)—Reading is broken and effortful with numerous pauses throughout. Reads primarily in groups of one or two words without pausing.

might consider upping the challenge somewhat by using more difficult or longer texts. Are children slow and plodding? Then children probably will benefit from further reading practice on texts of this type.

2. *Listen to the expressiveness that children display while reading aloud.* Ideally, children will read texts expressively. Instructors can ask themselves: Do children use expression that matches the meaning of the text? Do they emphasize the right words as they read? Do they emphasize the right syllables? If the reading sounds relatively natural, then children probably have enough fluency with that particular passage. If not, then the instructor can carry out his/her own reading with particular attention to appropriate expression. Instructors can have children practice reading aloud with expression.

3. *Try to determine whether the children have a basic understanding of what they are reading.* One goal of reading fluency is that children can read text well enough to develop a good basic understanding of the text. Instructors can ask themselves: Can children summarize the passage? Can they draw conclusions from it? If so (and the reading is relatively fluent), children might benefit from more difficult texts. If not, then staff members can discuss difficult vocabulary and they can read complex sentences with expression to help children understand how a fluent reading might sound. Children will probably need extra fluency practice on that level of text.

GLOSSARY

Autonomy—The speed, accuracy, and effortlessness of skills that come with practice.

Emergent literacy—The set of knowledge and skills that young children develop about reading and writing.

Environmental print—The print that is all around us and that is shared by persons living in a similar environment such as cereal boxes, labels, street signs, store signs, company logos, and restaurant menus.

Expressive reading—Intonation and expression that match the message of the text.

Fluent reading—Reading that is quick, accurate, and expressive, and that generally supports good comprehension.

Pausal intrusion—Unnecessary pauses that occur while reading aloud that interferes with the interpretation of the message.

Phonemes—The basic, distinguishable sounds of a language that distinguish one word from another.

Phonics—A method of reading by teaching children how to match letters or groups of letters onto the phonemes, or basic sounds, of the language.

Reading prosody—The expression and intonation with which children and adults read

text aloud. It includes pitch changes, volume changes, pause patterns, and rhythmic quality of the oral reading.

Repeated reading—An instructional strategy for promoting reading fluency where children repeatedly read a text over a number of days.

Scaffolding—An educational technique wherein teachers or parents provide various levels of assistance depending on the skill level of the child so that the child can complete an educational goal.

Spectrogram—A visual representation of the pause, pitch, and loudness features of speech, as well as some others.

Wide reading—An instructional strategy for promoting reading fluency by having children read a wide variety of texts.

Word calling—The tendency of some children to have difficulty understanding a text despite reading with grade-level fluency.

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