chapter 3

Why Do Some Readers Struggle with Fluency?

As I noted earlier, most beginning readers develop into fluent readers with little instructional attention to fluency, but some beginning readers never seem to move beyond word-by-word reading. They struggle, often for years, even after effective decoding instruction has enabled them to read reasonably accurately (Torgeson & Hudson, 2006).

This longstanding finding was indicated by Lyon and Moats (1997) in their decade-old review of intervention research: "It is critical to recognize that in all NICHD intervention studies to date, improvements in decoding and word reading accuracy have been far easier to obtain than improvement in reading fluency and automaticity" (p. 583).

So why is it that some students continue to struggle with fluency? In this chapter I set out an argument that suggests that most fluency problems are instructionally induced and instructionally maintained. I have made this argument earlier (Allington, 2006b; 2007a) and believe the research supports this view. However, I must also note that no experimental studies, the federal "gold standard" for evidence, are available to support my view.

There is a good reason that such studies do not exist. In order to "prove" that instructional factors foster dysfluent reading, one would have to design a study to intentionally create dysfluent readers. Although I have a good idea of just how to design that study, ethically I cannot do so. As a practical manner, even if I could get over my ethical concerns, federal regulations on research conducted with minors requires that I get the informed consent from parents or guardians (as well as the consent of a school district) to demonstrate that I can design lessons that will hinder fluency development. I would hope that I am correct in assuming that no parent (or school district) would allow me to implement an instructional design that would purposely hinder the development of fluent readers.

But if I were to design a program that would foster dysfluent reading, I would create lessons where readers were:

- Given a steady diet of too-difficult texts, texts they cannot read accurately
- Offered daily lessons that provide little high-success reading opportunity so that very little actual reading is completed
- Lessons where teachers, or others, frequently, consistently, and immediately interrupt readers when they misread a word

Unfortunately, this lesson design reflects many of the characteristics of the actual lessons that many struggling readers receive. In other words, I will suggest that "natural experiments," observations of variations in classroom

instruction, already provide the needed research evidence to support my argument about why many beginning readers never develop into fluent readers and why the most common lesson design of intervention programs produces little growth in fluency. In the remainder of this chapter I will review the available research that supports my argument and close with recommendations for the redesign of reading lessons for struggling readers.

☆ Too-Difficult Texts

Every reader, even a rather proficient reader, has fluency problems when given texts to read that are hard for them. The texts may be hard because they contain many rare, long, or hard-to-pronounce words. The texts may be difficult because the topic is wholly unfamiliar to the reader. When teachers routinely provide texts that are too hard, there is little opportunity for students to develop fluent reading skills.

Unfortunately, a long line of classroom observational research indicates that too-difficult texts are precisely what struggling readers are usually asked to read (Allington, 1983a; Gambrell, Wilson, & Gantt, 1981; Hiebert, 1983; Jorgenson, 1977; O'Connor et al., 2002; Vaughn et al., 2003). This occurs when a grade-level, one-size-fits-all core curriculum is put in place and all students are provided reading instruction in that curriculum material. In such situations the curriculum material may be of a level of difficulty that makes it appropriate for use with the normally achieving readers. But the reading material will be too challenging for those readers whose achievement has lagged behind.

For instance, in a third-grade classroom there may be five or more students whose reading development is closer to that of normally developing second-grade students than normally developing third-graders. The typical third-grade core reading program is supposed to be comprised primarily of stories of a level of difficulty appropriate for third-grade readers. (I noted the research earlier that demonstrates that this assumption has been disproven and that many of the texts will be hard even for normally developing readers.) That third-grade core reading program material will pose substantial difficulties for the struggling readers in the third-grade classroom. Teachers will also

find that current core basal reading programs offer little instructional advice to teachers on how the lessons might be adapted for the struggling readers (McGill-Franzen et al., 2006).

Alternatively, consider the students in sixth grade whose reading development is similar to that of typical third-grade students. These are just the sorts of students that O'Connor and colleagues (2002) studied in their experimental intervention. The study compared three approaches to educating struggling readers. In the first, students were tutored using grade-level materials from their classrooms. The second group of struggling readers were tutored in materials matched to their reading level (e.g., third-grade materials). The control group was not provided any tutoring. Both tutored groups had larger gains in reading than the control group. But the group of students tutored in materials at their reading level made significantly greater fluency gains than did the group tutored in classroom grade-level materials. The researchers concluded that the reading-level tutoring produced the largest gains in fluency, word recognition, and comprehension for lowest-achieving students, those least likely to be able to read grade-level materials even with tutorial support. It seems clear from this study that struggling readers are not likely to improve their fluency when given grade-level materials.

However, if one examines the texts that typical struggling sixth-grade readers have in their desks (or lockers, backpacks, etc.), one typically finds a bunch of texts of sixth-grade difficulty or higher (Allington, 2007b). There may be a sixth-grade reading or literature anthology as well as sixth-grade science, social studies, and health textbooks (all of which are likely to have difficulty levels above the sixth-grade level). So just what are these struggling sixth-graders supposed to read? If there is a classroom library collection, it is likely that almost all of the books in that collection are at the fifth- or sixth-grade level or higher. This means there would also be no classroom library books that the struggling sixth-grade readers can read. In fact, it is this dominant supply of grade-level reading materials that is the main reason struggling readers don't read very much. And because they don't read much, they remain struggling readers.

If struggling readers cannot read grade-level texts fluently or be taught to read fluently with those texts, what is a teacher to do? The research clearly indicates that the solution is to locate appropriately difficult texts for the reading lessons (and for science, social studies, and health classes).

What is an appropriate level of difficulty for a struggling reader and what is a too-hard text? If fostering fluency is the goal, then I suggest that any text that cannot be read with 99 percent accuracy is probably too difficult. In such a text a reader would mispronounce or purposely skip over one word in every 100 running words of text. That would be roughly 1 word every second or third page in a beginning book such as *Frog and Toad* by Arnold Lobel. But in other elementary-grade texts, readers would be missing 1 or more words on every page (see Table 3.1).

The percentages in the table were selected because different authors have recommended these various levels of accuracy as appropriate for fluency work and for independent reading. But quite honestly, I am not sure that 99 percent accuracy is high enough for fluency practice or for independent reading, at least with older elementary readers. Can you imagine reading a text where you found 3 words on every page you couldn't read, as would be the case of reading with 99 percent accuracy in one of the Harry Potter books? That 99 percent accuracy level would result in over 50 words that you wouldn't be able to read in the first chapter of the first Harry Potter book!

Realistically speaking, most of those 50+ words that would be read inaccurately would be words important to the story—words such as *mysterious, opinion, cloaks, concentrate, imagination, horribly, quiver, irritably, impatiently, astonishing, furiously, tidy, visible, sensible, piercing, rummaging, unblinkingly, contrary, gazed, shuddered,* and *chortled*. These 21 words come from the opening

▶ Table 3.1 **Number of errors per page at different accuracy rates in elementary texts**

	95%	98%	99%
Junie B. Jones (Park) series	5.0	2.0	1.0
Time Warp Trio (Scieszka) series	7.5	3.0	1.5
Wind in the Willows (Grahame)	11.0	4.0	2.0
Harry Potter (Rowling) series	16.0	6.0	3.0

Note: These estimates may vary a little depending on the edition of the book.

chapter of the first Harry Potter book. Now imagine that there are 30 more words you cannot read. If a reader misread or skipped over 50 such words in that first chapter, comprehension would be nil, so as to make fluent reading impossible.

There are two reasons that high levels of accuracy are essential for fostering fluency. First, and perhaps most obviously, it is impossible to read in phrases with expression if the individual has to frequently stop and figure out words (or at least try to). In such cases, much cognitive capacity is allocated to decoding/word recognition, and so little is left to allocate to parsing the sentence into appropriate phrase units and for the assignment of intonation and so on.

The second reason high levels of accuracy are important is related to the first but is basically a different issue. As noted earlier, readers become fluent as they develop larger and larger numbers of words that can be recognized at a glance. But to increase this store of at-a-glance words, readers need to consistently and repeatedly read a word correctly. The development of this essential component of fluent and skilled reading then requires accurate reading—a *lot* of accurate reading. Thus, the importance of the volume of reading that readers do is discussed in the next section.

☆ Reading Volume and Fluency Development

I have argued that a critical factor in designing interventions for struggling readers is ensuring that these students read at least as much as the achieving readers at their grade level (Allington, 2006b). Virtually every study of reading volume indicates that struggling readers engage in far less reading than do achieving readers. Both Stanovich and West (1989) and Share and Stanovich (1995) point out that it is extensive engagement in high-accuracy reading that allows readers to consolidate the various skills and components of proficient reading. When struggling readers are provided with a limited amount of such practice, they simply do not develop the skills and components that are essential for proficient, autonomous reading.

Guthrie (2004) has noted the substantial differences in the volume of reading that struggling and achieving readers do. He uses the available research to estimate that students whose reading skills are below the 25th percentile read about 30 minutes daily. At the 50th percentile, readers read about 120 minutes a day, and those at the 75th percentile read about 210 minutes daily. After 60 to 90 minutes of daily in-school reading, the remaining time is largely spent engaged in voluntary reading outside of school. By third grade, for instance, these routine differences in reading volume mean that the better readers have read *millions* more words than the struggling readers. That means that the better readers have successfully read the 3,000 most frequent words in English so many times that these words are almost surely words they recognize at a glance.

Having this large number of words recognized with little cognitive effort means that these readers can now focus on fluency, comprehension, and self-regulation while reading. But the struggling readers face a huge obstacle in ever becoming fluent. Torgeson and Hudson (2006) explain:

> This difficulty in recovering the "lost ground" in the development of sight-word vocabulary that results from several years of minimal and inaccurate reading is the simplest current explanation for the enduring reading fluency problems of students even after they become more accurate readers through strong reading [*decoding emphasis*] interventions. (pp. 152–153)

Thus, the research available shows that developing decoding skills, a common intervention concern, is simply not sufficient to foster fluent reading. Rather, the research indicates that successful interventions must focus on substantial increases in the volume of high-accuracy reading that struggling readers do if fluency problems are to be overcome.

One reason that the research on repeated reading interventions has demonstrated the positive outcomes that the NRP emphasized is that this intervention design reliably increases the volume of reading done by struggling readers. Additionally, repeatedly reading passages produces high-accuracy reading along with multiple successful encounters with the most common English words. In other words, the typical repeated reading intervention addresses both problems of too hard texts and too little reading activity.

There have been two major recent reviews of the research on the re-
peated readings strategy (Kuhn & Stahl, 2003; National Reading Panel, 2000).
Both point to the largely consistent evidence that the technique of repeated
readings improves the reading fluency of struggling readers. Less clear is
whether it improves other reading proficiencies. But much of the repeated
readings research is fundamentally flawed, according to Kuhn and Stahl
(2003). This is because most studies of repeated readings did not have the
control groups engaged in reading while the treatment groups engaged in
repeated readings of texts. Thus, it may simply be that the positive effects
of repeated readings derive mostly from increasing the volume of reading that
the treatment students did. There have been a few studies where the control
groups read independently for the same amount of time that the treatment
students spent completing their repeated readings activities. In those few
studies that included equal amounts of independent reading, the independ-
ent reading and repeated readings interventions produced similar positive
effects on both fluency and accuracy (cf. Homan, Klesius, & Hite, 1993;
Rashotte & Torgeson, 1985). In other words, simply increasing the volume of
reading produced the same positive effects on reading fluency and word
recognition as the repeated readings intervention strategy.

Noting this finding, Kuhn (2005a, 2005b) has experimentally compared
extensive independent reading with repeated reading interventions. Kuhn
assessed reading fluency gains as well as gains on other reading proficiencies.
She reported that increasing the volume of independent reading produced
comprehension gains that the repeated readings technique did not. Kuhn
commented on the fact that the traditional repeated readings strategy had no
comprehension focus and suggested that perhaps the focus on fluency, rate,
and accuracy may have biased the students in the repeated reading interven-
tions such that reading aloud fast and fluently became the goal, and under-
standing what was read became relatively unimportant.

Recently Kuhn and colleagues (2007) compared a repeated readings in-
tervention with what they called a wide reading intervention in a large-scale
study. The basic difference in these two lesson models was how much unique
text students read. Both groups did some repeated readings of texts but the
wide reading groups did fewer repeated readings and, instead, read lots of
other texts. The repeated readings groups simply read and reread the same
small number of texts. Both groups, however, were engaged in reading for

equivalent amounts of time each day. The authors concluded, "The current study confirms that, not only did the Wide Reading approach do as well as the FORI [repeated readings] approach, it was actually more effective for the participating students in two areas: first, improvements were seen sooner and, second, improvements were seen in connected text reading" (p. 27).

The available research on reading volume should make educators consider whether the major source of the problem of dysfluent readers is primarily one of limited opportunities for high-accuracy reading practice (Allington, 1984; 2006b; Guthrie, 2004). If struggling readers routinely do much less reading (as every study of this topic indicates) and especially if they have substantially fewer opportunities to engage in high-accuracy reading (as studies also indicate), then perhaps researchers have located the primary reason these struggling readers have failed to develop into fluent and engaged readers. If so, then teachers don't have to try to explain this lack of fluency by relying on conceptually muddy ideas such as learning disabilities, neurological damage, and attention deficits as the source of the fluency problem. Instead of creating pseudo-scientific labels for struggling readers, teachers can create better instructional environments and observe as fluency problems largely vanish.

If teachers give some students a steady diet of texts that are too difficult and thus offer them limited opportunities to practice high-accuracy reading, then teachers should expect that many of their students will experience difficulties in becoming fluent and engaged readers. Additionally, too-hard texts and lots of oral reading during reading lessons create a third instructional factor that works against developing fluent engaged readers.

☆ Interruptive Reading and Fluency Development (Or the Lack of It)

Researchers have well documented that struggling readers are more likely to be asked to read aloud in the classroom than are the achieving readers (Allington, 1983b; Chinn et al., 1993; Hiebert, 1983). Often this reading aloud occurs during a directed reading lesson when each child reads aloud

a bit, in turn. It is in such lessons that teachers are far more likely to interrupt the lower-achieving readers than the higher-achieving readers. Teachers are also more likely to interrupt poor readers more quickly, usually immediately following the incorrect pronunciation of a word. They are also most likely to ask the reader to "sound the word out" (Allington, 1980; Chinn et al., 1993; Hoffman et al., 1984). Teachers also allow other readers to interrupt struggling readers but discourage such interruptions when the better readers read aloud (Eder & Felmlee, 1984). These studies provide sound evidence that teachers interact differently with their achieving and struggling readers.

It is not clear why teachers respond so differently when good and poor readers read aloud. I think that teachers are typically attempting to help, to support, their struggling readers. It may be that because the struggling readers are too often reading from too-hard texts, the teacher realizes that they may not have the skills to figure out the word they misread. In other words, the common use of too-difficult texts with struggling readers creates a situation that calls out for teacher interventions. Alternatively, it may be that teachers hold general beliefs about the inability of struggling readers to solve problems independently and so they try to prompt or cue the readers to figure out the misread word. Or, perhaps because the text is so difficult the struggling readers are misreading so many more words that the teacher feels it necessary to intervene.

Nonetheless, the frequent and immediate interruptions have the potential, in and of themselves, to create not just dysfluent readers but also passive, dependent readers (Johnston & Winograd, 1985). Dependent readers rely on someone else to solve their problems, or what is called "learned helplessness" (Dweck, 1986). These readers typically have very limited ability to monitor their own reading and use fix-up strategies when they encounter difficulty.

Consider that struggling readers often encounter reading lessons where they will:

- Be asked to read aloud
- Be reading too-hard texts
- Be interrupted when they misread a word
- Be interrupted immediately after misreading
- Be asked to sound the word out

Contrast this scenario with what research reveals achieving readers typically encounter in their reading lesson. These students will:

- Be reading material of an appropriate level of difficulty
- Be asked to read silently
- Be expected to self-monitor and self-correct
- Have attention focused on understanding
- Be interrupted only after a wait period or at the end of a sentence
- Be asked to reread or to self-monitor their reading when interrupted

Given the striking differences that researchers have documented in the most common lesson design, is it any wonder that struggling readers do not read the same way that achieving readers do?

For me, the central and most critical problem is the immediate interruption when readers misread. I think this may be one of those holdovers from the era of behaviorist psychology, an era when it was thought that not correcting immediately would cause mislearning. Although there is some truth to that view, there is another unfortunate result of interrupting immediately. That result is that interrupting so quickly does not allow the reader to engage in self-monitoring of the reading. It is the case that for most English sentences, a misread word will become obviously wrong only when the reader continues reading to the end of the sentence.

Consider the reader who misreads *struck* as *stuck* in this sentence:

John stuck out on a curve ball.

Reading to the end of the sentence makes it obvious that a misreading has occurred (assuming the reader is monitoring his or her reading and knows something of the vocabulary of baseball). But if the teacher interrupts as soon as the misreading occurs (immediately after *stuck* is uttered), it is impossible for the child to recognize that the combination of words do not make any sense because "*John stuck . . .*" is a legal construction. In such a case the teacher cannot prompt the reader to self-monitor for meaning. This largely explains

why a teacher typically then directs the reader's attention to the word (*sound it out*) rather than to monitoring meaning.

Here is another example of the same sort where I note the critical implications of such "help."

> Ultimately, the reader fully accepts the external monitoring and no longer self-monitors his reading activity. Thus, we can observe these pupils read the sentence A below as sentence B.
>
> A.　John lives in a big white house.
> B.　John lives in a big white HORSE.
>
> This sort of substitution provides powerful evidence that the interruptive external monitoring has largely eliminated self-monitoring while reading. If you were to ask this reader, "What color HORSE do you live in?", he would invariably ask, "Do you mean HOUSE?" This pupil will never speak a sentence that confuses *house/horse* but with sufficient amounts of too hard reading along with interruptive monitoring, we can eliminate from his reading repertoire this language self-monitoring that he uses in literally every other language context. (Allington, 2007a, p. 3)

Teachers who interrupt immediately and when interruptions come frequently because the text is too hard create passive readers who rely more on the teacher to monitor their reading than on self-monitoring. But self-monitoring, independently and spontaneously correcting misread words, is a critical proficiency if one hopes to develop fluent and engaged readers (Clay, 1969; Walczyk & Griffith-Ross, 2007). Rasinski and Hoffman (2003) noted that a single, but widely cited, study of pupils with disabilities has been used to support immediate interruption after an oral reading error. That study has not been replicated, however, and the findings are at odds with other studies (e.g., Hoffman et al., 1984) that demonstrated a detrimental effect for immediate feedback compared to other options such as focusing on self-monitoring.

Fluency development is disrupted when pupils are (1) routinely given too-hard texts and (2) frequently interrupted while they read. In far too many lessons struggling readers receive one or both of these conditions. When

struggling readers read a text that is too difficult, they make many errors. Then the teacher feels compelled to interrupt and attempt to get the struggling reader to produce an accurate reading of the text. Over time, the struggling reader begins to read aloud more tentatively and waits for the teacher to confirm or reject the words as he or she reads them aloud. Eventually the reader and the teacher develop a reciprocal response pattern where the reader hesitates awaiting a confirmation from the teacher that the reading is correct, the teacher supplies a confirmation (e.g., "right," "uh-huh," "good job"), then the struggling reader continues on to the next word and engages in the same verbal dance with the teacher (Allington, 1980; McGill-Franzen & McDermott, 1978). As the reader becomes ever more dependent on the teacher to confirm or reject his or her responses, the reader hesitates more frequently and so the interruptions/confirmations also increase. Ultimately, the struggling reader becomes increasingly passive regarding self-monitoring, and his or her reading is now routinely word-by-word.

Modifying the reading lessons provided to the struggling readers so that there are few immediate interruptions while also focusing on improving their self-monitoring will be easier if teachers ensure that struggling readers have texts they can read accurately. Altering the struggling readers' lessons in this way may also increase the volume of reading.

Some children fail to develop adequate fluency for another reason: They have had limited reading practice, particularly practice in high-success texts. High-success reading experiences are characterized by accurate, fluent reading with good understanding of the text that was read. It is this sort of reading that too often seems in short supply in the reading experiences of struggling readers.

⭐ Some Concerns about the Repeated Readings Technique

The NRP (2000) reviewed the experimental research on interventions that fostered fluency development. The panel concluded that the evidence supported the technique of repeated readings as an evidence-based intervention.

In general, I agree. However, I am worried about the sudden emergence of several commercial intervention programs that entail the long-term use of the repeated readings technique as a general solution for lower-achieving readers.

I visit schools where struggling readers are placed in such intervention programs for a full year or even more! Both the available research and my clinical experience indicate that fostering fluency should typically take only a few weeks, certainly not years. Almost all of the fluency intervention studies the NRP reviewed were 5- to 10-week efforts, and none involved implementing the repeated readings technique over a period of years. Not only is the extended use of repeated readings as a primary intervention strategy unsupported by the research but it may also undermine the acceleration of both fluency and general reading development.

I have taken this stance because the research available suggests that an exclusive use of repeated readings seems to limit the development of comprehension and impinges on vocabulary growth (Kuhn, 2005a). The best advice to be drawn from the research, I believe, is that repeated readings should be viewed primarily as an initial and short-term intervention strategy. An initial intensive dose of repeated readings may be called for if struggling readers persistently read word-by-word. In such cases, the repeated readings technique seems to be a well-researched way to help readers break out of that style of reading and begin to read in phrases with expression.

The repeated readings of the same text limits the number of unique texts and the number of new words the reader encounters. And because the text will be read over and over again, there is little reason to focus on understanding what is being read, at least on the first reading. In addition, in the Kuhn and colleagues' (2007) study, reducing the time spent engaged in repeated readings and expanding the time struggling readers spent reading independently produced fluency gains more quickly and improved accuracy when reading connected text compared to extended use of the repeated readings technique. As with most issues in reading instruction, the use of the repeated readings technique must be guided by the needs of students. It is a useful, but limited, instructional strategy.

☆ Summary

Most students become fluent readers without much instructional guidance or support. I think the evidence is clear that teachers can design reading lessons so that virtually all beginning readers acquire the ability to read in phrases with expression and to self-monitor while they read. There are many common features of the reading lessons currently provided to both beginning and struggling readers that must be changed if all readers are to become fluent readers.

The most important change is to ensure that texts of an appropriate level of difficulty are being used in every reading lesson. When some readers are provided continuing lessons with texts that are too hard, fluent reading should not be an expected outcome. And when too-hard texts are used, readers get discouraged with reading and typically begin to avoid it whenever possible. This leads to struggling readers engaging in a minimal amount of reading, further undermining the likelihood they will become fluent and engaged readers. Too-hard texts seem to encourage interruptions by teachers, which then weakens the development of self-monitoring and slows reading to a crawl, which then means struggling readers read fewer words in every lesson than do their achieving peers. This vicious cycle of too-difficult texts, interruptive reading experiences, and limited reading leads predictably to persisting and persistent reading difficulties. Over the course of a few years, then, school systems produce struggling readers who face enormous obstacles to developing fluent reading abilities or high levels of reading proficiency.

Developing fluent readers will be easier if the problematic features of current reading lessons are changed. To become fluent readers, students need to develop:

- Appropriate decoding skills and strategies
- A large vocabulary of words whose meanings they know
- A store of words they can recognize at a glance
- The ability to self-monitor while they read
- The appropriate comprehension strategies to use while they read
- The motivation to read purposely and voluntarily

Fluency is not something that can be developed apart from these other critical aspects of proficient reading. Fluency development should always be on teachers' minds as they plan reading lessons, but that doesn't mean that every lesson is focused on fluency development. Nonetheless, more readers will become fluent readers if teachers place developing fluency on their instructional agenda and monitor its development regularly.

You can view a presentation on fluency given by Dr. Allington by visiting **www.learner.org/channel/workshops/ teachreading35/session2/index.html**.