Comprehension Instruction: What Makes Sense Now, What Might Make Sense Soon

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Abstract

There are a variety of well-validated ways to increase comprehension skills in students through instruction; these are summarized in this article. In addition, new hypotheses about effective comprehension instruction are emerging, and these are also summarized. Although too little comprehension instruction is now occurring in schools, much is known that would enable such teaching to be done with confidence; more will be known as the emerging hypotheses are evaluated in the years ahead.

Introduction

When I was asked to write the comprehension instruction chapter for the *Handbook of Reading Research: Volume III* (Pressley, 2000), I saw my assignment as a conservative one, to summarize practices of comprehension instruction that are well validated in research. Of course, I knew before I began the bibliographic research for the chapter what components of practice would end up being cited as effective, for I've spent much of the past three decades thinking about how to improve students' reading comprehension. Even so, a surprising insight emerged from writing the chapter, one not shared in the handbook: Given that there are some types of instruction that improve comprehension, it might just be sensible to do all of them. No one, however, has ever done an experiment to explore what happens when teaching is full of comprehension-enhancing approaches versus absent of them. We do not know what happens in classrooms where all that was recommended in the handbook chapter is tried.

One of my motivations for writing this article is that it might inspire some researchers to think about evaluating that possibility. A second is to make the case that we are about to know much more about what components might be added to comprehensive comprehension instruction, for many researchers are now turning their attention anew to the development of comprehension abilities in students by means of instruction.

I can encourage such an experiment with more confidence now than when I wrote the handbook chapter. Since I wrote my chapter, the report of the U.S. National Reading Panel (2000, online document) has appeared. For the most part, forms of instruction cited by the panel as facilitating comprehension were ones that I had also concluded increased comprehension. This was despite the fact that the panel's criteria for inclusion of research in its review was more narrow than my own, with the panel favoring true experiments over all other forms of inquiry. The convergence between the conclusions I offered in the handbook and those of the panel simply highlights that much is known about how to increase students' reading comprehension, much that is not very controversial.

That said, there remains a painful irony. Everyone in reading education knows about Dolores Durkin's (1978-79) now classic research. Durkin looked for comprehension instruction in the upper-elementary grades and found little, discovering instead a great deal of comprehension testing (i.e., teachers asked students questions about what they had read after they had gone through a text). Of course, way back then, there was an excuse: The explosion in comprehension instruction research had not occurred yet. Given the large volume of research on the topic in the past quarter century, there has been the potential for a revolution in schools with respect to comprehension instruction. Even so, no revolution has occurred. For example, when my colleagues and I observed fourth- and fifth-grade classrooms in the late 1990s, we, too, saw little comprehension instruction but many teachers posing postreading comprehension questions (Pressley, Wharton-McDonald, Hampston, & Echevarria, 1998).

Such observations made clear that there was good reason to put together the handbook chapter in the fashion it was put together -- that is, by emphasizing effective instruction -- for there is a real need for many more educators to be aware of what they can do to increase students' comprehension. I knew when I wrote the chapter that many well-informed researchers would find such a summary predictable. Even so, I felt that it could be illuminating for many school-based educators, who are the critical audience to inform and inspire if there is to be shift in how comprehension instruction occurs in schools. Consistent with that expectation, since the handbook has appeared, many school-based individuals have told me that they found the chapter helpful. I hope that this article will make information about comprehension instruction even more widely available.

The first section of this article is a brief summary of what was in the handbook chapter, intended to make readers aware of what they can do to teach comprehension to students that is defensible right now on the basis of research. The second section is a reflection on emerging themes in comprehension instructional research. It is intended to inform readers that comprehension instruction is a vital and dynamic area of inquiry in reading, one that promises to provide much more information about how to improve student understanding of text, information that could be used to transform reading instruction in schools.

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How Can Reading Comprehension Be Improved Through Research-Validated Instruction?

Reading is often thought of as a hierarchy of skills, from processing of individual letters and their associated sounds to word recognition to text-processing competencies. Skilled comprehension requires fluid articulation of all these processes, beginning with the sounding out and recognition of individual words to the understanding of sentences in paragraphs as part of much longer texts. There is instruction at all of these levels that can be carried out so as to increase student understanding of what is read.

Decoding. Perhaps it is a truism, but students cannot understand texts if they cannot read the words. Before they can read the words, they have to be aware of the letters and the sounds represented by letters so that sounding out and blending of sounds can occur to pronounce words (see, e.g., Nicholson, 1991). Once pronounced, the good reader notices whether the word as recognized makes sense in the sentence and the text context being

read and, if it does not, takes another look at the word to check if it might have been misread (e.g., Gough, 1983, 1984). Of course, reading educators have paid enormous attention to the development of children's word-recognition skills because they recognize that such skills are critical to the development of skilled comprehenders.

As part of such work, LaBerge and Samuels (1974) made a fundamental discovery. Being able to sound out a word does not guarantee that the word will be understood as the child reads. When children are first learning to sound out words, it requires real mental effort. The more effort required, the less consciousness left over for other cognitive operations, including comprehension of the words being sounded out. Thus, LaBerge and Samuels' analyses made clear that it was critical for children to develop fluency in word recognition. Fluent (i.e., automatic) word recognition consumes little cognitive capacity, freeing up the child's cognitive capacity for understanding what is read. Anyone who has ever taught elementary children and witnessed round-robin reading can recall students who could sound out a story with great effort but at the end had no idea of what had been read.

Tan and Nicholson (1997) carried out a study that emphasized the importance of word-recognition instruction to the point of fluency. In their study, struggling primary-level readers were taught 10 new words, with instruction either emphasizing word recognition to the point of fluency (they practiced reading the individual words until they could recognize them automatically) or understanding of the words (instruction involving mostly student-teacher discussions about word meanings). Following the instruction, the students read a passage containing the words and answered comprehension questions about it. The students who had learned to recognize the words to the point of automaticity answered more comprehension questions than did students who experienced instruction emphasizing individual word meanings. Consistent with other analyses (e.g., Breznitz, 1997a, 1997b), Tan and Nicholson's outcome made obvious that development of fluent word-recognition skills can make an important difference in students' understanding of what they read.

Thus, a first recommendation to educators who want to improve students' comprehension skills is to teach them to decode well. Explicit instruction in sounding out words, which has been so well validated as helping many children to recognize words more certainly (e.g., Snow, Burns, & Griffin, 1998, online document), is a start in developing good comprehenders -- but it is just a start. Word-recognition skills must be developed to the point of fluency if comprehension benefits are to be maximized.

Vocabulary. It is well established that good comprehenders tend to have good vocabularies (Anderson & Freebody, 1991; Nagy, Anderson, & Herman, 1987). This correlation, however, does not mean that teaching vocabulary will increase readers' comprehension, for that is a causal conclusion. As it turns out, however, when reading educators conducted experiments in which vocabulary was either taught to students or not, comprehension improved as a function of vocabulary instruction. Perhaps the most widely cited experiment of this type was carried out by Isabel Beck and her associates, who taught Grade 4 children a corpus of 104 words over a 5-month period (Beck, Perfetti, & McKeown, 1982). The children who received instruction outperformed noninstructed children on subsequent comprehension tests. When all of the work of Beck's group and others is considered (see, e.g., Beck & McKeown, 1991; Durso & Coggins, 1991), a good case can be made that when students are taught vocabulary in a thorough fashion, their comprehension of what they read improves.

One counterargument to this advice to teach vocabulary is that children learn vocabulary incidentally -- that is, they learn the meanings of many words by experiencing those words in the actual world and in text worlds, without explicit instruction (Stanovich, 1986;

Sternberg, 1987). Even so, such incidental learning is filled with potential pitfalls, for the meanings learned range from richly contextualized and more than adequate to incomplete to wrong (Miller & Gildea, 1987). Just the other morning, I sat in a reading class as a teacher asked students to guess the meanings of new words encountered in a story, based on text and picture clues. Many of the definitions offered by the children were way off. Anyone who has ever taught young children knows that they benefit from explicit teaching of vocabulary.

That children do develop knowledge of vocabulary through incidental contact with new words they read is one of the many reasons to encourage students to read extensively. Whenever researchers have looked, they have found vocabulary increases as a function of children's reading of text rich in new words (e.g., Dickinson & Smith, 1994; Elley, 1989; Morrow, Pressley, Smith, & Smith, 1997; Pelligrini, Galda, Perlmutter, & Jones, 1994; Robbins & Ehri, 1994; Rosenhouse, Feitelson, Kita, & Goldstein, 1997).

World knowledge. Reading comprehension can be affected by world knowledge, with many demonstrations that readers who possess rich prior knowledge about the topic of a reading often understand the reading better than classmates with low prior knowledge (Anderson & Pearson, 1984). That said, readers do not always relate their world knowledge to the content of a text, even when they possess knowledge relevant to the information it presents. Often, they do not make inferences based on prior knowledge unless the inferences are absolutely demanded to make sense of the text (McKoon & Ratcliff, 1992).

The received wisdom in recent decades, largely based on the work of Richard C. Anderson, P. David Pearson, and their colleagues at the Center for the Study of Reading at the University of Illinois in the 1970s, 1980s, and into the early 1990s, was that reading comprehension can be enhanced by developing reader's prior knowledge. One way to accomplish this is to encourage extensive reading of high-quality, information-rich texts by young readers (e.g., Stanovich & Cunningham, 1993).

Typically, however, when readers process text containing new factual information, they do not automatically relate that information to their prior knowledge, even if they have a wealth of knowledge that could be related. In many cases, more is needed for prior knowledge to be beneficial in reading comprehension. A large number of experiments conducted in the late 1980s and early 1990s demonstrated the power of "Why?" questions, or "elaborative interrogation," to encourage readers to orient to their prior knowledge as they read (Pressley, Wood, Woloshyn, Martin, King, & Menke, 1992). In these studies, readers were encouraged to ask themselves why the facts being presented in text made sense. This encouragement consistently produced a huge effect on memory of the texts, with the most compelling explanation emerging from analytical experiments being that the interrogation oriented readers to prior knowledge that could explain the facts being encountered (see especially Martin & Pressley, 1991). The lesson that emerged from these studies is that readers should be encouraged to relate what they know to information-rich texts they are reading, with a potent mechanism for doing this being elaborative interrogation.

Active comprehension strategies. Good readers are extremely active as they read, as is apparent whenever excellent adult readers are asked to think aloud as they go through text (Pressley & Afflerbach, 1995). Good readers are aware of why they are reading a text, gain an overview of the text before reading, make predictions about the upcoming text, read selectively based on their overview, associate ideas in text to what they already know, note whether their predictions and expectations about text content are being met, revise their

prior knowledge when compelling new ideas conflicting with prior knowledge are encountered, figure out the meanings of unfamiliar vocabulary based on context clues, underline and reread and make notes and paraphrase to remember important points, interpret the text, evaluate its quality, review important points as they conclude reading, and think about how ideas encountered in the text might be used in the future. Young and less skilled readers, in contrast, exhibit a lack of such activity (e.g., Cordón & Day, 1996).

Reading researchers have developed approaches to stimulating active reading by teaching readers to use comprehension strategies. Of the many possible strategies, the following often produce improved memory and comprehension of text in children: generating questions about ideas in text while reading; constructing mental images representing ideas in text; summarizing; and analyzing stories read into story grammar components of setting, characters, problems encountered by characters, attempts at solution, successful solution, and ending (Pearson & Dole, 1987; Pearson & Fielding, 1991; Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989).

Of course, excellent readers do not use such strategies one at a time, nor do they use them simply when under strong instructional control -- which was the situation in virtually all investigations of individual strategies. Hence, researchers moved on to teaching students to use the individual strategies together, articulating them in a self-regulated fashion (i.e., using them on their own, rather than only on cue from the teacher). In general, such packages proved teachable, beginning with reciprocal teaching, the first such intervention (Palincsar & Brown, 1984), and continuing through more flexible approaches that began with extensive teacher explanation and modeling of strategies, followed by teacher-scaffolded use of the strategies, and culminating in student self-regulated use of the strategies during regular reading (e.g., Anderson, 1992; Brown, Pressley, Van Meter, & Schuder, 1996; Duffy et al., 1987). The more recent, more flexible form of this instruction came to be known as transactional strategies instruction (Pressley et al., 1992), with the body of research on this approach recently cited by the National Reading Panel (2000) as exemplary work in comprehension instruction. When such instruction has been successful, it has always been long term, occurring over a semester or school year at minimum, with consistent and striking benefits.

The case is very strong that teaching elementary, middle school, and high school students to use a repertoire of comprehension strategies increases their comprehension of text. Teachers should model and explain comprehension strategies, have their students practice using such strategies with teacher support, and let students know they are expected to continue using the strategies when reading on their own. Such teaching should occur across every school day, for as long as required to get all readers using the strategies independently -- which means including it in reading instruction for years.

Monitoring. Good readers know when they need to exert more effort to make sense of a text. For example, they know when to expend more decoding effort -- they are aware when they have sounded out a word but that word does not really make sense in the context (Isakson & Miller, 1976). When good readers have that feeling, they try rereading the word in question. It makes sense to teach young readers to monitor their reading of words in this way (Baker & Brown, 1984). Contemporary approaches to word-recognition instruction also include a monitoring approach, with readers taught to pay attention to whether the decoding makes sense and to try decoding again when the word as decoded is not in synchrony with other ideas in the text and pictures (e.g., Iversen & Tunmer, 1993).

Good readers are also aware of the occasions when they are confused, when text does not make sense (Baker & Brown, 1984). A key component in transactional strategies instruction is monitoring. Even the first such package, reciprocal teaching (Palincsar & Brown, 1984), included the clarification strategy: When readers did not understand a text, they were taught to seek clarification, often through rereading. To improve children's reading and comprehension, it makes very good sense to teach them to monitor as they read, to ask themselves consistently, "Is what I am reading making sense?" Children also need to be taught that they can do something about it when text seems not to make sense: At a minimum, they can try sounding out a puzzling word again or rereading the part of a text that seems confusing.

Summary. Based on research, a strong case can be made for doing the following in order to improve reading comprehension in students:

- Teach decoding skills.
- Teach vocabulary.
- Encourage students to build world knowledge through reading and to relate what they know to what they read (e.g., by asking why questions about factual knowledge in text).
- Teach students to use a repertoire of active comprehension strategies, including prediction, analyzing stories with respect to story grammar elements, question asking, image construction, and summarizing.
- Encourage students to monitor their comprehension, noting explicitly whether decoded words make sense and whether the text itself makes sense. When problems are detected, students should know that they need to reprocess (e.g., by attempting to sound out problematic words again or rereading).

Such instruction must be long term, for there is much to teach and much for young readers to practice. Even so, there is little doubt that instruction that develops these interrelated skills should improve comprehension.

Little, if anything, offered in this section is debatable. That said, there are more debatable -- but very promising -- perspectives being offered, for there continues to be great researcher interest in development of even more effective comprehension instruction. These perspectives are presented in the following section.

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What Comprehension Instruction Could Be: Emerging Issues

Cathy Collins Block and I have edited a book about comprehension instruction that will be published late in 2001 (Block & Pressley, in press). We scoured the literature to identify those carrying out research on reading comprehension, with the goal of including all the cutting-edge thinking in one volume. We succeeded in obtaining chapters from a who's who of reading comprehension researchers, both senior scholars and younger colleagues who will soon define the field. The authors in the volume include Gerald Duffy, Gale Sinatra, Kathleen Brown, Ralph Reynolds, Linda Baker, Peter Afflerbach, Hiller Spires, Thomas Estes, Joanna Williams, Laura Smolkin, Carol Donavan, Darcia Narvaez, Tom Trabasso, Ed Bouchard, Pamela Beard El-Dinary, Diane Tracey, Lesley Mandel Morrow, Gay Ivey, P. David

Pearson, Nell Duke, Donna Ogle, Camille Blachowicz, John Guthrie, Sevgi Ozgungor, Marian Jean Dreher, Linda Gambrell, Patricia Koskinen, Alina Reznitskaya, Richard C. Anderson, Rachel Brown, Joseph Fisher, Jean Schumaker, Donald Deshler, Michelle Simpson, and Sherrie Nist.

In reading over their chapters, a variety of emerging themes was apparent, and these are summarized briefly here. The ideas that follow are present in the thinking of several contributors, with the kernels offered below typically representing amalgamated thinking rather than the exact position of any one author in the book. As an advance organizer, I offer the general conclusion that much of what is emerging in comprehension instruction research is fine tuning of ideas that are already well validated, mostly ones closely related to the those presented in the last section. Taken together, however, it is clear that the emerging thinking has the potential to provide a much richer understanding of comprehension instruction in the future than exists now.

The limits of word-recognition instruction. Although skilled and eventually fluent word recognition certainly facilitates comprehension, it is not enough. This conclusion contrasts with the thinking of some in the educational policy-making community who view word-recognition instruction as a panacea for reading problems, a simple view that reduces reading to recognizing words and listening to oneself read those words (e.g., Gough, Hoover, & Peterson, 1996). If that were all there is to it, then, of course, the many other interventions discussed in the first section of this article would not be as potent as they are. Those who argue that comprehension problems can be solved by taking care of word-recognition problems are ignoring a lot of relevant data.

Early teaching of comprehension skills. Traditionally, there has been a tendency among educators to view the primary grades as the time to hone word-recognition skills, with comprehension developed in the later grades. Increasingly, this view is rejected, with many demonstrations that interventions aimed at improving comprehension -- that is, interventions beyond word-recognition instruction -- do, in fact, make an impact during the primary years. The authors in the Block and Pressley edited book, in particular, recognize that the starting point for the development of many comprehension skills is teacher modeling of those skills. Hence, there is much commentary in the book about modeling, monitoring, and so on. Also, the authors were impressed that when researchers have asked primary-level students to use comprehension strategies and monitoring, the children have benefited greatly from it (Brown et al., 1996). There is definitely interest in expanding comprehension instruction in the early elementary grades, with the expectation that such instruction will affect 5- to 8-year-olds dramatically in the short term and perhaps lead to development of better comprehension skills over the long term.

Rethinking the "package" approach to comprehension strategies development. Although it is quite clear that good readers use repertoires of strategies to comprehend text and that such repertoires can be taught profitably to children (see, e.g., Brown et al., 1996; Palincsar & Brown, 1984; Pressley & Afflerbach, 1995), there is renewed interest in teaching strategies one at a time as a way of encouraging strategic comprehension. Keene and Zimmermann's (1997) *Mosaic of Thought* advanced the idea that teachers can become hooked on comprehension strategies themselves -- and come to understand the potency of strategies -- by learning them one at a time. There is no doubt that the Keene and Zimmermann book has fueled interest in comprehension strategies among teachers. The verdict is not yet in, however, about whether this approach does lead to teachers who are more strategic in their own reading and more effective in teaching strategies to young readers. We know that some teachers resist teaching comprehension strategies packages

(Pressley & El-Dinary, 1997). If Keene and Zimmermann's mosaic does increase teacher willingness to teach comprehension strategies, it will have been an important contribution to reading pedagogy.

Cognitive capacity constraints. It has been understood for the past quarter century that humans only have so much short-term memory capacity, which limits how much they can do consciously at one time. It also has been recognized that the more automatic reading is, the less capacity it consumes. Much attention has been given to this capacity-automaticity tradeoff with respect to word recognition and word comprehension (e.g., LaBerge & Samuels, 1974).

Just as it is being recognized that much more must be learned about how to increase fluency of word-recognition processes (National Reading Panel, 2000), there is additional recognition that much needs to be learned about how to increase fluency of higher order reading processes, including the automatic use of comprehension and monitoring strategies. According to this perspective, comprehension will only be maximized when readers are fluent in all the processes of skilled reading, from letter recognition and sounding out of words to articulation of the diverse comprehension strategies used by good readers (e.g., prediction, questioning, seeking clarification, relating to background knowledge, constructing mental images, and summarizing).

That use of comprehension processes must be automatic is one of the reasons that successful teaching of higher order comprehension processes occurs over years (Pressley et al., 1992). Automatic, fluid articulation of comprehension strategies develops slowly, when it develops at all. There is increasing awareness that teaching of comprehension strategies has to be conceived as a long-term developmental process. Although much is known about how to teach comprehension strategies when students are first learning them, very little is known about how teaching should occur as students are internalizing and automatizing strategies. Just as there needs to be study of instruction promoting fluency in word recognition, there needs to be study of instruction promoting fluency in use of higher order comprehension processes, including comprehension strategies and monitoring.

World knowledge. As described in the preceding section, the positive effects for reading comprehension of abundant prior knowledge have been noted for many years, but there has recently been increasing awareness that readers differ dramatically in the world knowledge they possess. In particular, membership in specific cultural groups goes far in determining what a reader knows that can be related to text -- and thus goes far in determining a reader's interpretation of text. In the early 20th century, there was a belief among many literary scholars that some interpretations of texts were better than others. Louise Rosenblatt's (1938, 1978) work has been influential in increasing appreciation of the fact that there are many legitimate interpretations to most texts. Cultural theorists have done much to promote awareness that a variety of legitimate interpretations spring from the same text because of cultural differences in readers.

That said, there are still some interpretations of a text that are very bad, with these recognizable as such because so few elements of the text are represented in them (e.g., Eco, 1990). One way that a reader can come to bad interpretations is to relate irrelevant or tangential world knowledge to texts being read.

Joanna Williams and other researchers have been exploring how some students with reading disabilities undermine their comprehension by relating prior knowledge to a text that just does not connect well with that text (see, e.g., Williams, 1993). Such a reader might be

reading a story about a plane trip, for example, and suddenly relate something heard on the radio about a plane crash. Williams and her associates are working on interventions to prevent such errant processing, designed to increase the likelihood that readers will relate appropriate world knowledge to texts being read.

Diverse texts. There is increasing concern that too much of the elementary reading curriculum has involved reading of narratives, with growing awareness that students need practice reading expository text. (Much of mature reading, of course, focuses on exposition.) In addition, there is emerging understanding that our text world is changing dramatically with the proliferation of electronic documents and multimedia. Little is known at this point about how Web-based and hypertext documents can be processed well; less is known about how to teach students to read such documents so as to maximize comprehension of the information encoded in them.

Diverse text tasks. Sadly, just as it was a quarter of a century ago, so it is now: Students often are asked to read a text in order to answer questions designed to do little more than test whether they have understood and remembered the text read. The problem with this task is that it is so little like the tasks readers carry out in the real world. More positively, in recent years there has been an increase in the study of more realistic tasks. John Guthrie and his associates have done much to increase understanding about how readers search text for information and can be taught to do so more efficiently (e.g., Guthrie, 1988). Others are studying how students synthesize information as they read multiple texts -- in particular, how they compose essays by integrating ideas found in several different documents (Flower, Stein, Ackerman, Kantz, McCormick, & Peck, 1990). There is increasing recognition that comprehension instruction needs to prepare readers to do more than respond to short-answer postreading questions or multiple-choice questions on a standardized test. Much hard thinking is occurring about what real-world comprehension demands are and how instruction can prepare young readers to meet them.

Diverse populations. In recent decades, there has been much more attention paid to the instructional development of reading skills in weaker readers than in average or above-average readers. There is increasing awareness that more needs to be learned about the effects of comprehension instruction on the full range of readers. There are many high school and college readers whose comprehension is disappointing, so there is plenty of incentive to explore instruction aimed at students who, although among the best readers in school, could be better.

Summary. What might research-based comprehension instruction include in the future? There will still be teaching of decoding skills, vocabulary, important world knowledge, comprehension strategies, and monitoring. The primary years will be richer, however, with improved methods of instruction for word recognition complemented by more teaching of comprehension strategies and reading of more diverse texts, especially texts rich in important world knowledge.

Keene and Zimmermann's (1997) book might succeed in getting more teachers to use active comprehension strategies, with a byproduct being that they will understand better why comprehension strategies should be taught. Commitment to teaching these strategies should then increase. Further, with increasing understanding that development of word-recognition *and* comprehension skills to the point of fluency is essential, there should also be more long-term attention paid to both word-level and higher order processes, with teachers requiring extensive practice of word-recognition and comprehension skills. In addition to increasing student reading of information-rich texts, teachers will also be alert to

students who are applying errant world knowledge as they read and will be armed with teaching techniques to encourage use of appropriate knowledge. Comprehension will be assessed more broadly than it is now, with application of ideas in text emphasized over short-answer postreading questions. Finally, teachers will be better prepared to teach comprehension to all students, for much will be learned in the coming decade about how comprehension instruction can benefit average and above-average readers in addition to the weakest readers.

There is good reason to believe that comprehension instruction will improve as the research programs covered in the Block and Pressley (in press) book come to fruition and the findings in that research are translated into practice.

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In Closing

I close by returning to the possibility raised in the introduction of this article: There needs to be experimental validation of comprehensive comprehension strategies instruction. There is a great need to know just how much of an impact on reading achievement can be made by instruction rich in all the individual components that increase comprehension. Of course, the hope is that there will be much benefit; the fear is that such instruction might be overwhelmingly complex. If all the components are simply thrown into the mix, instruction will be confusing and ineffective. With some experience in attempting to mix these components, how to create more effective blends might become more apparent so that meaningfully articulated and effective teaching occurs. There is much interesting work ahead before comprehension instruction is understood fully.

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