

## Can Reading Comprehension Be Taught?

by Daniel T. Willingham & Gail Lovette — September 26, 2014

*In this commentary we suggest that reading comprehension strategy instruction does not actually improve general-purpose comprehension skills. Rather, this strategy represents a bag of tricks that are useful and worth teaching, but that that are quickly learned and require minimal practice.*

The funny thing about reading comprehension strategy instruction is that it really shouldn't work, but it does. This commentary seeks to provide insight into how it should work and guidance on effective strategies for implementation.

Consider some common reasons why a student who decodes well might fail to understand what he reads. The student (a) doesn't know the meaning of some words; (b) doesn't notice that he does not comprehend the text; or (c) fails to make inferences. The importance of vocabulary is easy to appreciate; we can see why it's helpful to notice if you do not understand what you are reading. The importance of inferences may be less obvious.

Inferences matter because writers omit a good deal of what they mean. For example, take a simple sentence pair like this: "I can't convince my boys that their beds aren't trampolines. The building manager is pressuring us to move to the ground floor." To understand this brief text the reader must infer that the jumping would be noisy for the downstairs neighbors, that the neighbors have complained about it, that the building manager is motivated to satisfy the neighbors, and that no one would hear the noise were the family living on the ground floor. So linking the first and second sentence is essential to meaning, but the writer has omitted the connective tissue on the assumption that the reader has the relevant knowledge about bed-jumping and building managers. Absent that knowledge the reader might puzzle out the connection, but if that happens it will take time and mental effort.

Reading comprehension strategies (RCS) focus on these three trouble areas: vocabulary, noticing understanding, and connecting ideas. To address vocabulary, students are encouraged to use contextual cues to make educated guesses about the unfamiliar word (Jenkins, Matlock, Slocum, Jenkins, & Slocum, 1989). For monitoring comprehension, they are, well, urged to monitor their comprehension during and after reading a text (Baker & Zimlin, 1989). When it comes to making inferences, there are two families of strategies. Some set tasks can only be accomplished if the student ties together meaning across sentences: the student might be asked to summarize the text (Armbuster, Anderson, & Ostertag, 1987) or to create a visual mental image as she reads (Borduin, Borduin, & Manley, 1994). Other strategies focus on the fact that inferences usually require knowledge about the content; using the title of the text as a cue, the reader might be encouraged to think about what she knows about the topic (Dole, Valencia, Greer, & Wardrop, 1991) or to generate both explicit and inferential questions about the text that she will answer as she reads (Davey & McBride, 1989).

There's a temptation to think of RCS instruction as improving students' reading skills. As students practice, we do see some hallmarks of skill improvement like increased automaticity and self-regulation; low-level tasks (e.g., decoding) no longer require much attention, and readers become increasingly aware of strategies they might deploy to become more effective. Thus, it's easy to assume that RCS instruction is akin to instruction in other skills, such as golf. The coach describes how a competent performer executes the task, and the novice tries to follow suit: use a grip that's firm but not too tight, pay attention to gaze direction, and so forth. The coach provides instruction on how to execute the swing in the right way, and the novice practices executing with these instructions in mind. Eventually execution becomes automatic, and is seamlessly incorporated into the skill.

But RCS instruction can't work this way. It can't tell a reader the specifics of how to achieve reading comprehension because comprehension depends on connecting the meaning of sentences, and doing that depends on sentence content. No RCS can offer general guidelines about how to connect sentences; you need to know that the first sentence is about bed trampolines and second sentence is about apartment managers before you know how they relate.

So RCS instruction is not like coaching. Suppose you got home from Ikea with a desk to be assembled, and found the instructions said no more than "Put stuff together. Every so often, stop, look at it, and evaluate how it's going. It may also help to think back on other pieces of furniture you've built before."

These instructions don't tell you how to build the desk—for that you need to know whether piece A attaches to B or C. Rather, it's advice regarding what to think about as you're putting the pieces together. That is what RCS instruction does; it tells you what to think about as you're trying to understand a text.

So how in the world does that help comprehension?

RCS instruction undeniably *works*. Ample research demonstrating this is summarized in the National Reading Panel report and in more recent reviews (National Institute of Child Health and Human Development, 2000; Suggate, 2010). What gives?

Here's our interpretation. The vague Ikea instructions aren't bad advice. You're better off taking an occasional look at the big picture as opposed to keeping your head down and your little hex wrench turning. Likewise, RCS encourage you to pause as you're reading, evaluate the big picture, and think about where the text is going. And if the answer is unclear, RCS give students something concrete to try and a way to organize their cognitive resources when they recognize that they do not understand.

RCS instruction may be at its best in telling students what reading is supposed to be. Reading is not just about decoding; you are meant to understand something. The purpose is communication. This message may be particularly powerful for struggling readers, whose criterion for "understanding" is often too low (Markman, 1979). One of us works extensively with struggling adolescent readers who frequently approach the task of reading as getting to the last word on the page.

This is all to the good, but if we're right, RCS instruction has a serious limitation. Its success is not due to the slow-but-steady improvement of comprehension skills, but rather to the learning of a bag of tricks. The strategies are helpful but they are quickly learned and don't require a lot of practice.

And there is actually plenty of data showing that extended practice of RCS instruction yields no benefit compared to briefer review. We know of eight quantitative reviews of RCS instruction, some summarizing studies of typically developing children (Fukkink & de Glopper, 1998; Rosenshine, Meister, & Chapman, 1996; Rosenshine & Meister, 1994) and some summarizing studies of at-risk children or those identified with a learning disability (Berkeley, Scruggs, & Mastropieri, 2009; Elbaum, Vaughn, Tejero Hughes, & Watson Moody, 2000; Gajria, Jitendra, Sood, & Sacks, 2007; Suggate, 2010; Talbott, Lloyd, & Tankersley, 1994); none of these reviews show that more practice with a strategy provides an advantage. Ten sessions yield the same benefit as fifty sessions. The implication seems obvious; RCS instruction should be explicit and brief.

Far from a let-down, this strikes us as wonderful news. To the extent that educators have been devoting time to RCS instruction, they can now focus on other, more fruitful activities, such as generative vocabulary instruction, deep content exploration, and opportunities for reading across genres and content areas. When it comes to improving reading comprehension, strategy instruction may have an upper limit, but building background knowledge does not; the more students know, the broader the range of texts they can comprehend.

This conclusion is perhaps the most important; most educators feel that the curriculum has narrowed in the last ten years, with a frantic emphasis on reading and math. That may be true, but even fifteen years ago, scant time was devoted to history, civics, science, drama, and art in the early elementary years (National Institute of Child Health and Human Development Early Child Care Research Network, 2005). To make time, we must curtail English language arts activities that offer the smallest payoff. Reading comprehension strategy instruction appears to be a particularly good candidate.

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