

# Is reading comprehension a hidden disability?

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When I was in grade school, our classes were always divided into smaller groups for reading instruction. These reading groups, for reasons that were never fully explained, were named after birds, so that the high-achieving readers were known as the Bluebirds, and the kids with the most difficulty were the Cardinals. The Robins and the Sparrows fell in between. Everyone knew what bird you were.

Yes, I was a Bluebird, and my best friend Bobby was a Cardinal. Since these groups met in a corner of the regular classroom, everyone could hear the others reading—or failing to read. I can still recall how uncomfortable it was to hear Bobby struggle with the words on the page. He just couldn't make sense of them, so he would try to sound them out, or guess, or often as not just stare. It would take him forever to get through a sentence in this painstaking way.

This is how we typically think of a reading “problem”—the inability to decode symbols and change them into spoken language. Kids with this problem are hard to miss. But there may be many other kids in the classroom who are also poor readers, but in a very different way that's often invisible. These kids read accurately and fluently from the page—they might even be Bluebirds—but they don't understand the meaning of all those words rolling off their tongues.

Reading comprehension may be a “hidden disability,” according to a growing body of new research. We all know what reading comprehension is, since it’s a part of many formal achievement tests later in life. But it can often go undetected in the classroom—especially early on—because no one asks fluent readers if they know the meaning of what they just read. They’re good at recognizing words and saying them out loud, but that doesn’t mean they’re accomplished readers.

At least that’s the theory of psychological scientist Charles Hulme of York University, in the UK. He and a team of colleagues have been exploring this hidden reading problem, and they’ve come to believe that it may be at its heart a spoken language problem. For example, in one study of eighth graders—some poor decoders, others poor comprehenders, and the rest regular readers—the poor comprehenders understood fewer spoken words, had worse spoken grammar, and understood less of what they heard. By contrast, they were essentially normal when it came to sounding out words. Poor decoders were the opposite: They couldn’t sound out many of the words, but had no deficits in vocabulary, grammar or listening comprehension. That sounds like Bobby.

But unlike Bobby and the other Cardinals, poor comprehenders have less conspicuous, yet broad language difficulties that pre-date reading—and most likely cause the later difficulties. These deficits are probably very common, and not severe enough to be diagnosed as a learning disorder. But the scientists believe they add up to a subclinical language disorder—and the foundation of later reading failures.

If poor reading is fundamentally a spoken language problem, it would seem to follow that interventions ought to target spoken language—and that is exactly what Hulme and his colleagues have been trying. In one study, for example, they identified 8- and 9-year-old children who had reading comprehension problems, and randomly assigned them to different interventions. Some got help in reading and understanding written text, and others got only help with spoken language—no reading or writing—and still others got a mix of both. They all got 90 minutes of help every week for 20 weeks, after which their skills were tested. They were also tested again almost a year later, to see if any gains persisted.

The results were very clear. As Hulme (and colleague Margaret Snowling) report [on-line in the journal \*Current Directions in Psychological Science\*](#), all three groups showed improvement in comprehension immediately after the training, but those trained only in oral language showed dramatic gains into the following year—much more than the others or the controls. What’s more, the gains from the oral language training—and the lesser gains from a combined approach—appeared to come from improvement in vocabulary, including vocabulary that had not been explicitly taught in the training. In other words, the spoken language training seems to have resulted in a generalized improvement in the kids’ ability to understand language.

These preliminary findings are encouraging. They suggest that the proper kind of teaching can remedy the language weaknesses that lead to poor understanding. And indeed, another study involving 4- and 5-year-old children also showed clear—and persistent—gains in vocabulary and grammar after training in oral language. This raises the hope that such early intervention might even prevent the development of reading comprehension difficulties.

Reading comprehension is critical to success in life, more than ever in history. Reading difficulties create educational difficulties, which in turn lead to social and economic disadvantage, including

joblessness. Kids with poor comprehension skills may be flying under the radar of classroom teachers, but they can't continue to avoid detection. They won't be asked to read out loud in the real world, but they will be expected to know what they've read.

Wray Herbert's book, [\*On Second Thought\*](#), is about thinking and decision making. Excerpts from his two blogs—"We're Only Human" and "Full Frontal Psychology"—appear regularly in [\*Scientific American Mind\*](#) and in [\*The Huffington Post\*](#).