Redefining Reading Comprehension

Four major developments over the last 20 years have helped expand our understanding of reading—it's not a mechanical operation, it's a creative endeavor.

The days when reading comprehension skill was equated with reading speed or the ability to regurgitate the text have thankfully given way to a broader view of reading. Overly text-based accounts of comprehension have been displaced by multifaceted considerations of the subjectivity of meaning-making, shared understandings held by communities of readers, and reading as the flexible orchestration of problem-solving strategies in conjunction with the thoughtful consideration of ideas. Further, inference and evaluation are regarded as essential to achieving basic understanding as they are to the critical thinking that grows with interpretation and the ability to recount literal detail. In other words, a mechanical view of reading has given way to a view of reading as a creative enterprise.

The view that reading is a creative activity has its roots in the thinking of several scholars over the century. For example, Thorndike, in his study of students' "errors" when reading a difficult paragraph, clearly saw the reader as being involved in creation rather than translation. As he stated, "to read means 'to think' as truly as does 'to evaluate' or 'to invent' or 'to demonstrate' or 'to verify'" (1917, p. 914). Based upon his analysis of oral reading miscues, Goodman (1967) suggested that readers are involved in an intricate creation of meanings reflecting an interweaving of their own ideas and those suggested by the text. And over the past 20 years especially, research has brought to the fore a cadre of views that support and expand upon such a view of comprehension.

From my perspective, four major developments since the 1970s have contributed to such an expansive conception of comprehension. I would describe these as viewing reading (1) as constructive processes, (2) as writing, (3) as engagement, and (4) as situation-based.

**Reading as Constructive Processes**

In the 1970s, a kind of zeitgeist, or cognitive revolution, occurred, which brought to prominence what has been termed a constructivist or schema-theoretic view of reading comprehension. At that time, researchers and theorists gravitated to the view that readers' use of their background knowledge to "construct" meanings is the fuel by which they navigate their way through texts, using a repertoire of behaviors to create, refine, and re-think meanings. After all, in numerous studies, the reader's background knowledge had proved a better predictor of recall than verbal intelligence, word recognition, overall reading ability, vocabulary knowledge, and other factors (Anderson and Pearson 1984). Further, in related studies, the influence of other "reader-based" fac-
If viewing reading as writing expanded our views of reading, interest in engagement deepened them.

In many reading and writing classrooms in which most of the ideas discussed follow the lead of the teacher, not the child. In fact, on average, fewer than 10 percent of the ideas discussed are student initiated. Further, most lines of thought are not sustained, usually less than a minute is spent developing or discussing an idea (O’Flahavan et al. 1986).

In addition, rather than having Peter set his own purposes, ask his own questions, explore the characters and events for himself, and reflect upon what he has read, the teacher has a set of questions to which he expects students to respond and a set of criteria for judging the responses. Further, Peter is expected to work alone with minimal input from peers to achieve understandings that are terminal rather than ongoing.

In selecting the reading material and shaping the questions to ask, Peter’s teacher likely considered his students’ background knowledge, however, she controls the floor. Peter is in the position of having to struggle against the tide or relinquish certain initiatives build bridges of understanding from his experiences, ask his own questions, assess his own understandings.

Constructivism may have broadened our thinking about reading, but it did not have a great deal of impact upon practice. Most teachers, test-makers, and curriculum developers still expected uniformity in how texts were interpreted and understood. They also remained support for a view of reading that was asocial or solitary, teacher- or text-driven, static or terminal. Further, they persisted in emphasizing regurgitation, answering someone else’s questions (rather than the child’s own questions), and sometimes assuming that a literal recasting of the story was the necessary prerequisite to evaluative or inferential responses.

Reading as Writing
Constructivism, however, did plant the seeds for change. Constructivist notions were more fully embraced in the 1980s, when the view of reading as writing began to emerge. Early in the decade, classroom teachers and language arts researchers encountered the work of...
writing researchers (e.g., Groves 1978, 1983, Eng 1971, Flower and Hayes 1980), and major changes in the teaching of writing resulted. As students did more and more writing, it became evident that their writing was influencing their interest in reading, their attitudes toward reading, as well as their approaches. Take, for example, Chris, a third grader who experienced the increased emphasis on writing and reading-writing connections.

During the year, Chris has written several books and completed numerous projects. When Chris writes, she spends some time planning, including gathering together resources and checking on possible directions. If you talk to Chris during the planning stages of her writing, she will likely tell you about her research on the topic. Chris has written inductive as well as aductive ideas, or questions she is trying to answer. Then, as she writes, Chris will stop to mull over her goals, conference with others, check with books she has read, or route to defining her directions, reshaping her thoughts, and so on.

If asked about a story she is writing, Chris is apt to talk about the problems she creates for her reader as well as the images she creates. Chris explained a section of a piece she had written: "Well, on the second page it says, 'Brad Wilson was walking down a dirt road.' and they (the readers) have a dirt road in their mind, but when I say, 'which is really a road because of a good day's rain,' they have a clue and they keep it in their minds." Finally, Chris will share what she has written with others. Sometimes she feels as if she never finishes a story, just moves on.

Now consider Chris as a reader. As Chris plans what she writes, she will think and plan what she will read. She will decide upon her focus, the questions she wants answered, and the sections of books to which she will refer. As she reads, she is apt to pause as meanings are developed, ideas considered, and understandings revalued. After reading, she will share her interpretation with others.

As my example illustrates, the reading and the writing Chris initiates are somewhat parallel. Both processes involve her in researching, asking questions, tying together ideas, rethinking, using peers as sounding boards for directions, and so on. At the same time, what Chris has written influences how she reads and thinks about ideas and how they are crafted.

In turn, what Chris writes is influenced by what she has read. She often experiments with ideas and techniques emanating from her reading. Further, Chris enlists writing and reading together such that they reflect a view of meaning-making that involves orchestrating the use of various resources. Her desk is a workbench from which Chris chooses writing or reading tools or refers to them for help. Moreover, as Chris reads and writes, she is engaged in a rich array of thinking. She does not merely paraphrase or regurgitate ideas, she evaluates issues, explores possibilities, adopts various perspectives, experiments with ideas, and discovers new insights.

The "reading as a writer" concept has had a significant impact both upon our definition of reading and on our practices. Whereas advocates of schema-theoretic notions voiced support for practices that supported a view of meaning-making that was reader-based, social, personal, and idiosyncratic, the advent of a more "wheeler" view of reading moved us toward such a disposition. Whereas schema-theoretic notions had little impact upon the skills and abilities that directed curriculum, a writer-based view of reading moved programs to focus upon composing behaviors including brainstorming, self-questioning, visualizing, rethinking, and so on. Whereas schema-theoretic views had little impact upon the extent to which interpretations were shared, reading tied to writing assumed a collaborative thrust. Whereas schema-theoretic views tended to separate reading from writing, and to focus upon the reading of a single text, the growing interest in writing resulted in a marriage of reading and writing. This enabled considering the complex issues of meaning-making using several texts and other resources simultaneously (see Tierney and Shannah, in press).

Reading as Engagement

If viewing reading as writing expanded our views of reading, interest in engagement deepened them. The research on engagement has moved us toward views of reading that connect readers to their imaginations and that reach beneath the surface to a fuller consideration of the reader's emotional, affective, and visual involvement. In other words, research on engagement has moved us beyond the conceptualization of reading as a bare-boned schematization of ideas to a consideration of meaning that includes an appreciation of the images that readers triggers, the emotional involvements that may permeate their responses, and the sense of what Tolkien referred to as "the secondary world involvement into which readers transport themselves" (Tolkien 1964).

Consider those moments in your own reading when the vicariousness takes hold. You have a sense of being there, as a sort of ghostly watcher—standing beside, behind, or within characters. Sometimes you develop such intimate relationships with texts that you feel as if the author is speaking to you or that you want to intrude and say something. Even very young children being read to by a parent will reveal such engagements, for example, as they join with Maurice Sendak's (1963) Max from Where the Wild Things Are and say, "Be still," or when they ask the parent to read a section again in order to have the monologue "just right." Carlsen and Sherrill (1988) have collected thousands of statements from readers that include references to their memories of such involvement. Here are two reflections.

The one classic that greatly influenced my life was Robinson Crusoe. Crusoe and I had much in common. We were both alone on our little islands—our own little worlds. Crusoe was my idol, so for several
The Meeting

Lennie rode to the house of a man named McLean to have a talk with Grant: He wore his uniform and had a sword buckled at his side, and there should have been candelabra and pictures and trumpets going on before 1863. He was the last American knight and he had a granddaughter about him, and when he rode out of the war something that will never come back rode out of American life with him.

Great moments provide their own dramatic contrast. Grant came to the meeting in the coat of a private soldier, with hemmed shoulder, straps tack-tied on, and his boots and uniform were spattered with mud. He had forgotten to wear his sword—as an immensely practical man he hardly ever bothered with it. During the Great Battle of the Wilderness his sidearm had been a jackknife, with which his only weapon. Bullets whirled through the fighting ranks, and there was nothing at all imposing about him as he sat down for the third time in this way to write the terms of surrender for an opposing army. The bearded man looked the part of a great soldier, the victor looked perhaps a clerk from a Galena leather store, unacceptably rigged out in faded regimentals, scribbling on a scratch pad in the front room of a little house in southern Virginia.

The terms were simple. The beaten army would not go off to prison camp, any more than had the case after Vicksburg. The men would lay down their weapons and go home, and since most of them were small farmers, and the war was about over, Grant directed that each one who claimed to own a horse or mule be allowed to take one home with him from the stock of captured Confederate army animals. The men would need these beasts to get in a crop and work their farm, said Grant. No one knew better than he that the heartbreak of trying to get a living from the land with inadequate equipment.

And he wrote into the terms of surrender one of the great sentences in American history. Officers and men were to sign paroles, and then they were to go home. They were to be disturbed by the United States authorities as long as they observe their paroles and the laws in force where they reside.

Grant looked at the beaten army and he saw his own fellow Americans, who had made their fight and lost and now wanted to go back and rebuild. But the war had aroused much hatred and bitterness, especially among those who had done no fighting, and Grant knew very well that powerful men in Washington were talking angrily of reinstitution and draft, and wanting to draw up prescription lists, so that leading Confederates could be tried and hanged.

The sentence Grant had written would make that impossible. They could proceed against Robert E. Lee for instance, only by violating the pledge of U.S. Grant who held the stars and bars. The way Lee had treated the prisoners at Appomattox, if they could not hang Lee they could hardly hang anybody. There would be no hangings. Grant had ruled them out.

It did not strike the eye quite as quickly, but U.S. Grant had a certain grandeur about him, too.

—from Bruce Catton's America, Bruce Catton (1979)
**Reading as Situation-Based**

Certainly, over the past 20 years our views of comprehension have made major advances. In conjunction with the developments I have described, they have become more detailed, expansive, and rich. The last development I will describe moves us still further. In particular, the notion that comprehension should be regarded as situation-specific reflects a movement away from assuming that comprehension processes are neatly prepackaged to the view that they are ill-structured, complex, and vary from one context to another.

In the past 10 years, a growing number of psychologists (e.g., Kintsch 1988, Sealey-Brown et al. 1989, Spiro et al. 1987) have argued for an approach to learning that reflects this view of reading comprehension. As Spiro and colleagues (1987) have asserted:

> The overall effect of the simplifying features of knowledge representation systems and instructional strategies mentioned previously is a leveling tendency, a tendency towards monolithic approaches. Understanding is seen as proceeding by essentially the same way across instances of the same topic. Our view is different. The conditions for applying old knowledge are subject to considerable variability, and that variability in turn requires flexibility on the part of the learner. Monolithic representations of knowledge will too often leave the holders facing situations for which their rigid "plaster casts" simply do not fit. The result is the often heard complaint of students, "We weren't taught that." By this, they mean that they weren't taught exactly that. They lack the ability to use their knowledge in new ways, the ability to think for themselves (p. 9).

Situation-based cognition brings to the fore several key ideas. Among those central to understanding comprehension are contexts, multiple slants, and flexibility. A key tenet is that information that is to be used in lots of different ways needs to be explored in lots of different ways. This suggests not limiting information to a single point of view, single interpretation, single system of classification, single slant, or single case. In many ways, situation-based cognition dovetails with developments pertaining to reading as writing and reading as engagement—especially, the notion that a reader's understanding is enhanced when readers cross-examine their comprehension within text worlds.

Problem solving rests upon tying problems to contexts rather than either scripting them of such foundations or relying on overly generalized principles. Problem solving hinges on the availability and connectiveness of multiple schemas, including the ability to flexibly use multiple analogies and several cases.

> The notion of situation-based cognition illuminates the differences between the realities of real-world learning and knowledge and school-based learning and knowledge. If you consider the knowledge of people in and out of school and how they learn, some startling contrasts emerge (see fig. 1).

**A Reader's Journey**

For the last two decades, researchers have been trying to account for the intense nature of a reader's involvement as well as the riches reflected in responses of different readers to different texts and the same reader to the same text—especially those readers who find reading empowering. Cognitive scientists might view this effort as trying to come to grips with a robust model of comprehension and comprehension development. Literary theorists might perceive this movement as accounting for the intersubjectivity of different responses that arise in conjunction with the intertextuality of texts readers make across texts and to other readers. Practitioners might view this as being child-centered. Those members of society concerned with the dulling of students' minds might perceive this orientation as the development of a "productive and more generative literacy."

For researchers and others who enjoy looking into the windows of the reader's mind, I hope our explorations have just begun and that our awe for what readers do remains intact. Above all, I see reading as a place where readers discover and reflect upon themselves—who they are and what matters. They do so as they develop intimate relationships with authors and characters, participate in events, journey into different times, make discoveries, solve mysteries, celebrate or share in joy or disaster, and are moved to voice opinions, and sometimes even to revolt.

A reader's journey through text is likely to be full of images, tensions, anticipations, reactions, identifications, empathies, appreciations, delights, satisfactions, and reflections. Unmistakably, these journeys are quite personal and uncommon, but at the same time, they are collaborative and shared. Above all, they are full of potential for discovering self.

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**Fig. 1: School-Based vs. Real-World Learning and Knowledge**

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<thead>
<tr>
<th>In School</th>
<th>Out of School</th>
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<tbody>
<tr>
<td>Ideas and strategies are defined by principles.</td>
<td>Ideas and strategies are defined by examples and cases.</td>
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<tr>
<td>Ideas and strategies are often presented out of context.</td>
<td>Ideas and strategies are presented in context.</td>
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<tr>
<td>Ideas and strategies are often presented as if they were straightforward, well-organized, and usually hierarchical.</td>
<td>Ideas and strategies are viewed as situational, ill-structured, messy, and interrelated.</td>
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<td>Ideas and strategies are presented as if they were absolute.</td>
<td>Ideas and strategies are viewed as relative and requiring further consideration.</td>
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