

**Stanovich K E.** Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Read. Res. Quart.* 16:32-71, 1980.  
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This review paper synthesized results from the literature on context effects in reading into a model of individual differences that explained the previously paradoxical finding that contextual effects on comprehension were more salient in better readers, but that it was the poor reader who relied more on context to facilitate word recognition. [The SSC/® indicates that this paper has been cited in over 145 publications.]

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July 13, 1988

My colleague Richard F. West and I began studies of context effects on the word recognition of children when we were both graduate students at the University of Michigan in the mid-1970s. At the time we were heavily influenced by the popular top-down models of the reading process.<sup>1</sup> We fully expected to make an experimental mark by providing more rigorous confirmations of the individual-differences predictions of these models than had previously existed. To our surprise our initial studies<sup>2</sup> failed to confirm one of the most basic predictions of the top-down models: that the word recognition of children who were better readers would be more influenced by contextual information. Instead, we observed precisely the opposite: the word recognition processes of better readers were less influenced by contextual manipulations. This finding—which contradicted assumptions about the effects of context that were common in the reading literature and that had been widely disseminated in textbooks on reading education—was confirmed in numerous subsequent investigations.<sup>3-5</sup>

The finding left a theoretical problem, however, because better readers had been found to show greater effects of contextual manipulations in other studies employing different paradigms. My review paper clarified the then confusing literature by es-

tablishing that how contextual variables interacted with skill depended on the level in the processing system that the contextual variable was affecting. I was able to demonstrate, by a review of the literature, that when the contextual variable tapped comprehension processes, better readers displayed larger effects; however, when the contextual variable tapped word recognition processes, the opposite was true.

To explain the interaction of contextual information and reading skill at the word recognition level I made use of the idea of interactive processing that had already been imported into the psychology of reading by others<sup>6</sup> and married it to the idea of compensatory processing: that deficiencies at any level in the hierarchy of reading-related cognitive processes could be compensated for by a greater reliance on other knowledge sources. The idea of interactive-compensatory processing, and an emphasis on the demarcation of levels of processing when surveying the literature, resolved most of the paradoxes in reading theory that our own early results had helped to create.

Six years later, I again surveyed the literature on context as part of a larger theoretical review paper for the same journal.<sup>7</sup> The conclusions in my earlier 1980 paper, with minor modifications, were found to have stood the test of time. This second review paper—which in part evolved from the earlier work—won the 1988 Albert J. Harris Award of the International Reading Association.

I think there are two reasons the 1980 interactive-compensatory paper is frequently cited. One is that the issue of context effects had loomed large in reading theory for quite some time but by the late 1970s had entered a stage of utter confusion. Teachers were bombarded by seemingly contradictory studies and theories at every turn. By arguing that the contradictions in the literature were more apparent than real and by claiming that there was actually convergence among the empirical studies, my review became a lightning rod for all sides in the previous debate. Even those who disagreed with my conclusions were forced to deal with them.

The second reason this paper has received so many citations is that there is something in it for many different basic and applied science communities. There were instructional implications for reading educators, but there was also a mini-theory of the interactions among contextual and stimulus information sources that was of interest to cognitive scientists. Thus, it is the only paper I have ever written that has been cited in both the *Reading Teacher* and in *Behavior and Brain Sciences!*

1. Smith F. *Understanding reading*. New York: Holt, Rinehart and Winston, 1971. 239 p. (Cited 505 times.)
2. West R F & Stanovich K E. Automatic contextual facilitation in readers of three ages. *Child Develop.* 49:717-27, 1978. (Cited 85 times.)
3. Stanovich K E, West R F & Feeman D J. A longitudinal study of sentence context effects in second-grade children: tests of an interactive-compensatory model. *J. Exp. Child Psychol.* 32:185-99, 1981. (Cited 35 times.)
4. Stanovich K E, Nathan R G, West R F & Vals-Rossi M. Children's word recognition in context: spreading activation, expectancy, and modularity. *Child Develop.* 56:1418-29, 1985. (Cited 5 times.)
5. Perfetti C A. *Reading ability*. New York: Oxford University Press, 1985. 282 p. (Cited 45 times.)
6. Rumelhart D E. Toward an interactive model of reading. (Dornic S, ed.) *Attention and performance*. New York: Academic Press, 1977. Vol. 6. p. 573-603. (Cited 50 times.)
7. Stanovich K E. Matthew effects in reading: some consequences of individual differences in the acquisition of literacy. *Read. Res. Quart.* 21:360-407, 1986.