## This letter was written by:

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In this letter, you will find some very comforting information pertaining to the actual number of words a student must memorize in order to become functionally literate in our society. I hope this dispels the myth that students must memorize the 5,000,0000 words they will see in grades one through nine.

There clearly is hope for non-phonic learners.

More on Word Recognition by Dr. Chuck Hargis University of Tennessee Knoxville, TN

I read with concern the article by Connie Juel and Cecilia Minden-Cupp, "One Down and 80,000 to Go: Word Recognition Instruction in the Primary Grades," in the December 1999/January 2000 issue of The Reading Teacher. I also read the error correction in the following issue. However, the correction is not nearly sufficient to remedy the misinformation the article presents. I quote, with the correction italicized, the passage I dispute: "The sheer volume of words that children are expected to read quickly and accurately is daunting. According to Carroll, Davies, and Richman (1971) and Adams (1990), children will be expected to recognize and know well over 80,000 different words by the end of eighth grade. This means that they must be able to recognize these words and know their meaning" (p. 332).

The Carroll, Davies, and Richman study included a sample of over 5 million words taken from more than 1,000 publications that U.S. school students encountered in reading materials in Grades 3 through 9 in all subject areas. A total of 86,741 different words were counted through the end of the ninth grade. This study resulted in The American Heritage Word Frequency Book, the book cited by Juel and Minden-Cupp. The list of 86,741 different words in no way implied a student's knowledge of them. The list was designed as a reference work to help students deal with those words they did not know.

I quote from Barry Richman's foreword to the book: "Finally, at the risk of belaboring the obvious, the corpus reflects neither the vocabulary that the students know nor the vocabulary that the authors imagine they should know, but only the vocabulary to which they are exposed" (p. vi, vii; the italics are Richman's). Apparently the obvious was not belabored sufficiently for Juel and Minden-Cupp.

A guide to what students know at various grade levels can be found in The Living Word Vocabulary--The Words We Know: A National Vocabulary Inventory Study by Edgar Dale and Joseph O'Rourke (1979). This study was conducted using the 44,000-word graded list developed by Edgar Dale. I quote the authors: "In the past we have had extensive word lists by E.L. Thorndike, The American Heritage Word Frequency Book, and others solely on the basis of frequency in literature, textbooks and other writing. This is the first time we have had an extensive list of word meanings and their familiarity scores" (p. 1; the italics are the authors').

The 44,000 words were tested on the 320,000 students in Grades 4, 6, 8, 10, 12, 13, and 16. Each of the words was tested on students from grade to grade, up the grades, until its meaning was known by at least 67% of the students in that grade. If we accept the 67% standard, then less than half these words would be known by students in the eighth grade. Many of the words were known by less than half the college seniors .

We should keep in mind that many of the words counted in the Carroll et al. study appeared only rarely. If the words that appeared fewer than 20 times were separated, the number would be greatly reduced. Consider the fact that the 1,000 most frequently occurring of these words accounted for 84.6% of the 5 million plus words (Walker, 1979). Included in this list are most of the 800 words that had the highest frequency in Grade 3 and 4 reading materials. The ability to recognize these words is a great advantage in reading anything else. A word recognition vocabulary of 2,000 of the highest frequency words would enable a student to recognize about 90% of the words they will encounter in reading material through the ninth grade. For those primary-grade teachers who were frightened by the Juel/Minden-Cupp article, this number of words is a more reasonable expectation for average third graders at year's end.

Two other points that I hope will hearten teachers. The King James version of the Bible contains only about 7,000 different words exclusive of proper names. And William Shakespeare, the most bountiful word user ever, needed only 29,066 different words for all his works.