

Vocabulary comes from Reading

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Research consistently concludes that vocabulary comes from reading, not study.

Crucial evidence for the hypothesis that vocabulary comes from reading and that reading provides all the vocabulary we need comes from "read and test" studies. In these studies, subjects read a passage that contains words unfamiliar to them, are not focused on the new words, and are then given a surprise test on the words.

Some of the most important read and test studies were done at the University of Illinois (Nagy, Herman, and Anderson 1985; Nagy, Anderson, and Herman 1987). The Illinois researchers used elementary school students as subjects and passages from elementary school textbooks as texts. Their measures of vocabulary knowledge had an important feature: They were sensitive to whether subjects had acquired just part of the meaning of a target word. Nagy and colleagues (1985) concluded from their data that when an unfamiliar word was seen in print, "a small but reliable increase of word knowledge" typically occurred (Nagy and Herman 1987, p. 26), but this increase was easily enough to account for vocabulary acquisition.

Size and Complexity

There are simply too many words to teach and learn one at a time. Estimates of adult vocabulary size range from about 40,000 (Lorge and Chall, 1963) to 156,000 words (Seashore and Eckerson 1940), and it has been claimed that elementary school children acquire from eight (Nagy and Herman 1987) to more than 14 (Miller 1977) words per day.

Not only are there many words to acquire, there are also subtle and complex properties of words that competent users have acquired. Quite often, the meaning of a word is not nearly adequately represented by a synonym. As Finegan (1999) points out, words that appear to have the same meaning refer to slightly different concepts or are used in slightly different ways (e.g. the difference between "vagrant" and "homeless.")

Also, when we acquire a word we acquire considerable knowledge about its grammatical properties. English speakers, for example, can freely add "un" to many adjectives, e.g. producing "unhappy" from "happy," and but cannot do the same with "sad." Professional grammarians have struggled to properly describe the generalizations underlying such phenomena, and they are rarely taught.

Vocabulary teaching methods typically focus on teaching simple synonyms, and thus give only part of the meaning of the word, and none of its social meanings or grammatical properties. Intensive methods that aim to give students a thorough knowledge of words are not nearly as efficient as reading in terms of words gained per minute. In fact, Nagy, Herman, and Anderson (1985) argue that picking up word meanings by reading is 10 times faster than intensive vocabulary instruction. Their suggestion is not to do both instruction and reading – the time is better spent in reading.

Competence without Instruction

People with large vocabularies and good writing ability do not generally claim to have developed them through study. Smith and Supanich (1984) tested 456 company presidents and reported that they had significantly larger vocabulary scores than a comparison group of adults did. When asked if they had made an effort to increase their vocabulary since leaving school, 54.5 percent said they had. When asked what they did to increase their vocabulary, however, about

half of the 54.5 percent mentioned reading. Only 14 percent of those who tried to increase their vocabulary (3 percent of the total group) mentioned the use of vocabulary books.

Comparison of Reading/Hearing Stories and Instruction

In a series of studies of adult second language acquirers, Beniko Mason (Mason and Krashen, 2004) concluded that developing vocabulary knowledge from listening to stories is much more efficient in terms of words acquired or learned per minute than vocabulary-building exercises. In addition, in studies comparing in-school self-selected reading (sustained silent reading) with traditional instruction, readers consistently show superior performance on tests of vocabulary (Krashen, 2004).

Light Reading and Vocabulary Growth

Research by Hayes and Ahrens (1988) suggests that lighter reading can play an important role in helping readers move to more demanding texts. According to their findings, it is highly unlikely that much educated vocabulary comes from conversation or television. Hayes and Ahrens found that the frequency of less-common words in ordinary conversation, whether adult-to-child or adult-to-adult, was much lower than in even the “lightest” reading. About 95% of the words used in conversation and television are from the most frequent 5000.

Printed texts include far more uncommon words, leading Hayes and Ahrens to the conclusion that the development of lexical knowledge beyond basic words “requires literacy and extensive reading across a broad range of subjects” (p. 409). Table 1 presents some of their data, including two of the three measures they used for word frequency. Note that comic books occupy a position between conversation and abstracts of scientific papers, falling somewhat closer to conversation. This suggests that they can serve as a conduit to more challenging reading.

Table 1. Common and uncommon words in speech and writing

	frequent words	rare words
Adults talking to children	95.6	9.9
Adults talking to adults (college grads)	93.9	17.3
Prime-time TV: adult	94	22.7
Children’s books	92.3	30.9
Comic books	88.6	53.5
Books	88.4	52.7
Popular magazines	85	65.7
Newspapers	84.3	68.3
Abstracts of scientific papers	70.3	128.2

frequent words = percentage of text from most frequent 5000 words

rare words = Number of rare words (not in most common 10,000) per 1,000 tokens.
from: Hayes and Ahrens (1988)

Finegan, E. 1999. *Language: Its Structure and Use*. New York: Harcourt Brace. Third edition.

Hayes, D., and M. Ahrens. 1988. Vocabulary simplification for children: A special case of “motherese”? *Journal of Child Language* 15: 395-410.

Mason, B. and Krashen, S. 2004. Is form-focused vocabulary instruction worth while? *RELC Journal* 35 (2): 179-185.

Nagy, W., Herman, P., and Anderson, R. 1985. Learning words from context. *Reading Research Quarterly* 17: 233-255.

Nagy, W., R. Anderson, and P. Herman. 1987. Learning word meanings from context during normal reading. *American Educational Research Journal* 24: 237-270.

Nagy, W., and P. Herman. 1987. Breadth and depth of vocabulary knowledge: Implications for acquisition and instruction. *The nature of vocabulary acquisition*, ed. M. McKeown and M. Curtiss. Hillsdale, NJ: Erlbaum. pp. 19-35.

Krashen, S. 2004. *The Power of Reading*. Heinemann Publishers and Libraries Unlimited.

Lorge, I., and J. Chall. 1963. Estimating the size of vocabularies of children and adults: An analysis of methodological issues. *Journal of Experimental Education* 32: 147-157.

Miller, G. 1977. *Spontaneous apprentices: Children and language*. New York: Seabury.

Seashore, R., and L. Eckerson. 1940. The measurement of individual differences in general English vocabularies. *Journal of Educational Psychology* 31: 14-31.

Smith, R., and G. Supanich. 1984. *The vocabulary scores of company presidents*. Chicago: Johnson O'Conner Research Foundation Technical Report 1984-1.