

COMMENTARY: CAN FREE READING TAKE YOU ALL THE WAY? A RESPONSE TO COBB (2007)

Jeff McQuillan

Center for Educational Development

Stephen D. Krashen

University of Southern California

Cobb (2007) argues that free reading cannot provide L2 readers with sufficient opportunities for acquiring vocabulary in order to reach an adequate level of reading comprehension of English texts. In this paper, we argue that (1) Cobb severely underestimates the amount of reading even a very modest reading habit would afford L2 readers, and therefore underestimates the impact of free reading on L2 vocabulary development; and (2) Cobb's data show that free reading is in fact a very powerful tool in vocabulary acquisition.

COBB'S CLAIM: FREE READING IS NOT SUFFICIENT

Krashen (1989, 2004) and others have argued that free reading is a major contributor to vocabulary development among both first and second language readers (see also McQuillan, 1998). Free and extensive reading advocates have claimed that such reading can and does provide acquirers with sufficient resources to reach a high level of literacy development.

Cobb (2007) claims, however, that free reading cannot possibly provide sufficient opportunities for L2 readers to reach high level of vocabulary acquisition, of going "all the way" to the state of a fluent adult L2 reader. Cobb cites evidence showing that vocabulary acquisition requires a minimum of six to ten exposures to a word family, and that the minimal number of word families required for comprehension of non-specialist materials in English is 3000 to 5000, depending on which estimate is used (2007, p. 41). For this study, Cobb used the low end of these estimates (six exposures to a word family, 3000 word family level).

Cobb analyzed how frequently vocabulary occurred in three subsets of a corpus of academic, fiction, and newspaper texts, each subset containing between 163,000 and 179,000 words, in order to determine if words occur in sufficient frequency for acquisition (see Table 1). (Cobb explains that the newspaper sample is about 100 pages of newspaper reading, the academic sample about 17 scientific papers, and the fiction sample about six stories the size of Alice in Wonderland.) Cobb estimated that in a "year or two" of language study, a student could read the equivalent of one of these three subsets, or roughly 175,000 words (p. 41). He considered this to be an "optimistic" estimate.

Table 1. Number of Words in Each Sample

| Subset | Words in Sample |
|--------------|-----------------|
| Press | 179,000 |
| Academic | 163,000 |
| Fiction | 175,000 |
| Total | 517,000 |

Cobb then randomly selected ten word families each from of the 1000, 2000, and 3000 most frequently appearing word families in English and determined how many times those families appear at each level for each of the three genres of reading material. Using corpus analysis, he found that while the frequency of recurrence for the 10 word families would probably be sufficient at the 1000 word level for any of the

three genres, free reading would be insufficient to attain the 2000 and 3000 word level. As illustrated in Table 2 (from Cobb, Table 1), one word out of the sample of ten does not appear often enough in newspapers, two out of ten in academic writing, and three out of ten in fiction.

Table 2. Results for 2000 Word Frequency Word Families: Frequency of Occurrence (From Cobb, 2007, Table 1)

| | Press | Academic | Fiction | Total |
|------------------|--------------|-----------------|----------------|--------------|
| persua' | 17 | 3 | 7 | 27 |
| grade' | 14 | 25 | 8 | 47 |
| technolog' | 9 | 8 | 0 | 17 |
| moon' | 6 | 27 | 31 | 64 |
| wire' | 3 | 5 | 20 | 28 |
| maintain' | 16 | 49 | 6 | 71 |
| analy' | 12 | 129 | 4 | 145 |
| drama' | 40 | 14 | 8 | 62 |
| depress' | 14 | 7 | 9 | 30 |
| sue' | 8 | 7 | 1 | 16 |
| Threshold | 9 | 8 | 7 | 10 |

The situation is even more serious at the 3000 word level, with six out of ten failing to make the minimum threshold of six occurrences in the press corpus, eight out of ten in the academic corpus, and five out of ten in the fiction corpus (Table 3).

Table 3. Results for 3000 Word Frequency Word Families: Frequency of Occurrence (From Cobb, 2007, Table 1)

| | Press | Academic | Fiction | Total |
|------------------|--------------|-----------------|----------------|--------------|
| irritat' | 3 | 0 | 6 | 9 |
| millimeter' | 0 | 0 | 0 | 0 |
| urgen' | 7 | 1 | 7 | 15 |
| transmi' | 5 | 9 | 1 | 15 |
| chew' | 0 | 0 | 3 | 3 |
| naked' | 2 | 1 | 18 | 21 |
| civiliz' | 5 | 12 | 12 | 29 |
| contest' | 15 | 1 | 4 | 20 |
| charm' | 10 | 1 | 12 | 23 |
| prompt' | 6 | 4 | 5 | 15 |
| Threshold | 4 | 3 | 5 | 8 |

Cobb thus concluded that "even the largest plausible amounts of free reading will not take the learner very far in the 3000-family zone" (p. 44).

CRITIQUE AND REINTERPRETATION OF COBB'S DATA

Cobb's analysis suffers from two major problems. First, the amount of reading that Cobb proposes as "optimistic" is, in fact, pessimistic in the extreme. The number of words read is a product of time spent reading and reading rate. Table 4 summarizes the results from 11 studies that have reported L2 reading rates with readers from a variety of L1 backgrounds in both EFL and ESL settings. Fraser (2007) summarizes the results of several studies included in Table 4 (Cushing-Weigle & Jensen, 1996; Haynes &

Carr, 1990; Nassaji & Geva, 1999; Oller & Tullius, 1973; Taguchi, 1997), and data reported from these studies are taken directly from her Appendix A. For one study (National Institute for Literacy, 2003), oral reading rates were used. Studies are ordered by average reading rate in words-per-minute. L2 reading proficiency is based on the researcher's own classification of the students' levels.

Table 4. Average Reading Rates of L2 Readers

| Study | Population | L2 Reading Proficiency | Average L2 Reading Rate |
|---|---|---------------------------|-------------------------|
| Taguchi, Takayasu-Maass, & Gorsuch (2004) | 1 st year college EFL | Beginning | 83 wpm |
| Haynes & Carr (1990) | Undergraduate EFL | Intermediate/ Advanced | 86 wpm |
| Hirai (1999) ¹ | 1 st – 3 rd year college EFL | Various | 87.5 wpm |
| National Institute for Literacy (2003) ² | Adult ESL | Beginning | 102 wpm (oral) |
| Taguchi & Gorsuch (2002) | 1 st year college EFL | Beginning | 115 wpm |
| Taguchi (1997) | Undergraduate EFL | Beginning | 127 wpm |
| Fraser (2007) ³ – China Group | 3 rd year undergraduate EFL | Intermediate/ Advanced | 135.5 wpm |
| Fraser (2007) ³ – Canada Group | 1 st -4 th year undergraduate ESL | Intermediate/ Advanced | 140.4 wpm |
| Cushing-Weigle & Jensen (1996) | Undergraduate EFL | Advanced | 158 wpm |
| Nassaji & Geva (1999) | Graduate ESL | Advanced | 179 wpm |
| Oller & Tullius (1973) | Undergraduate & graduate ESL/EFL | Intermediate/ Advanced | 206 wpm |

¹ Table 1, whole group score

² Cohort 11 of all ESL readers

³ Table 1, Task 4 – Learning

It should be noted that these studies probably underestimate reading rates achieved during free reading. The texts used to determine reading rate in all cases were selected by the researcher, and thus may have been too difficult for the reader or on a topic about which the reader lacked sufficient background knowledge. It seems likely that students engaged in free reading, where the text is self-selected and thus probably a closer fit for the reader's proficiency and background knowledge, would read at a faster rate.

It is clear from Table 4 that L2 reading rates vary widely, with more proficient readers reading faster than less proficient ones. We conservatively choose 100 wpm as an average reading rate for our analysis, which is slightly below the average rate for readers at a beginning level of L2 reading proficiency for the studies included here (106.8 wpm). An adult L2 reader reading at a speed of 100 words-per-minute would take 1,750 minutes to go through 175,000 words of text. That is the equivalent of 29.2 hours of reading which, over the course of two years of language study, would amount to a mere 2.4 minutes of free reading per day. What Cobb is actually demonstrating is that a very small amount of reading over a period of 12 to 24 months would not be sufficient to make one a fluent L2 reader.

Second, an examination of the "total" columns in Tables 2 and 3 reveals that a reader who read newspaper, academic, and fiction texts (all three subsets), for a total of about 517,000 words, would easily pass even the more demanding criterion of ten encounters for all of the words at the 2000-family level, and for eight of the ten at the 3000-family level.

An L2 acquirer reading 100 words-per-minute would be able to accomplish this in a little more than 86 hours, or at the rate of one hour per day, the equivalent of a single academic quarter (approximately 13

weeks). Free reading across a variety of genres can indeed give you the necessary vocabulary for adult-level fluency. The contrast between this estimate and Cobb's is presented in Table 5.

Table 5. Two Estimates of Amount of Reading (at 100 words per minute)

| Estimate | Words | Hours | Daily |
|---------------------|---------|-------|------------------------------------|
| Cobb | 175,000 | 29.2 | 2.4 minutes over 2 years |
| McQuillan & Krashen | 517,000 | 86.2 | 60 minutes over 1 academic quarter |

FREE READING: MORE POWERFUL THAN WE THOUGHT?

What is surprising about Cobb's data is just how powerful free reading really is, even at the minimal levels he used. Even if a reader stuck to one genre, and read as little as Cobb suggests, a lot would be accomplished. With just 100 pages of newspaper text alone, for example, one can make significant progress toward the 2000-family level. Cobb's analysis shows that you would have sufficient encounters for acquisition of nine of the ten sample word families. Similar progress could be made by reading the equivalent of six books the length of *Alice in Wonderland*, which, while perhaps insufficient for academic purposes, is very impressive.

A reader who dedicated a modest 20 minutes per day to free reading would, over Cobb's hypothetical two years of language study, would encounter 1,460,000 words – a substantial number, more than eight times the number of words in Cobb's estimate. It seems likely, then, that this amount would allow one to reach even the 5000-word level.

Free reading may not be sufficient to meet the needs of all demanding academic or specialized texts, although nothing in Cobb's analysis would preclude that possibility. Further research should take into account a more realistic estimate of the volume of reading by the typical L2 acquirer. Cobb has shown us, however, that for a modest investment in time, free reading does appear to be more than adequate to reach the vocabulary levels that he argues are necessary for a fluent L2 reader.

ABOUT THE AUTHORS

Jeff McQuillan is a Senior Research Associate at the Center for Educational Development in Los Angeles, California.

Email: jeff@learningexperts.com

Stephen D. Krashen is Emeritus Professor of Education at the University of Southern California in Los Angeles, California.

Email: skrashen@yahoo.com

REFERENCES

Cobb, T. (2007). Computing the vocabulary demands of L2 reading. *Language Learning & Technology*, 11(3), 38-63. Retrieved October 7, 2007 from <http://llt.msu.edu/vol11num3/cobb>.

Cushing-Weigle, S., & Jensen, L. (1996). Reading rate improvements in university ESL classes. *CATESOL Journal*, 9, 55-71.

Fraser, C. (2007). Reading rate in L1 Mandarin Chinese and L2 English across five reading tasks. *The Modern Language Journal*, 91(3), 372-394.

Haynes, M., & Carr, T.H. (1990). Writing system background and second language reading: A component skills analysis of English reading by native speakers of Chinese. In T.H. Carr & B.A. Levy (Eds.), *Reading and its development: Component skills approaches* (pp. 375-418). San Diego, CA: Academic Press.

Hirai, A. (1999). The relationship between listening and reading rates of Japanese EFL learners. *The Modern Language Journal*, 83(3), 367-384.

Krashen, S.D. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the Input Hypothesis. *The Modern Language Journal*, 73, 440-464.

Krashen S.D. (2004). *The power of reading, 2nd edition*. Portsmouth, NH: Heinemann.

McQuillan, J. (1998). *The literacy crisis: False claims, real solutions*. Portsmouth, NH: Heinemann.

Nassaji, H., & Geva, E. (1999). The contribution of phonological and orthographic processing skills to adult ESL reading: Evidence from native speakers of Farsi. *Applied Psycholinguistics*, 20, 241-267.

National Institute for Literacy (NIFL). (2004). *Adult reading components study*. Washington, DC. Retrieved October 7, 2007, from http://www.nifl.gov/readingprofiles/FT_Browse11.htm.

Oller, J. W., & Tullius, J. R. (1973). Reading skills of non-native speakers of English. *International Review of Applied Linguistics*, 11, 69-79.

Taguchi, E. (1997). The effects of repeated readings on the development of lower identification skills of FL readers. *Reading in a Foreign Language*, 11, 97-119.

Taguchi, E., & Gorsuch, G. (2002). Transfer effects of repeated EFL reading on reading new passages: A preliminary investigation. *Reading in a Foreign Language*, 14(1), 43-65.

Taguchi, E., Takayasu-Maass, M., & Gorsuch, G. (2004). Developing reading fluency in EFL: How assisted repeated reading and extensive reading affect fluency development. *Reading in a Foreign Language*, 16(2), 70-96.