ESL Vocabulary Acquisition: Target and Approach

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Introduction

A widely accepted distinction related to vocabulary knowledge refers to lexical "receptive knowledge", which involves the ability to understand a word while listening or reading, versus "productive knowledge", the ability to use a word in speaking or writing (Nation, 2001, p. 25). As a rule of thumb, the receptive vocabulary is at least twice the size of the productive vocabulary.

This article looks at the average receptive vocabulary size of adult native English speakers, inquires into whether non-native speakers can acquire a receptive vocabulary size comparable to that of native speakers, and discusses the amount and type of words needed for reading comprehension in a second language.

The purpose of the article is to provide teachers of English as a second language with the key research findings suggesting that acquiring a native-like receptive vocabulary size in a second language as an adult learner is an ambitious but achievable goal and to justify why direct vocabulary teaching of the most frequent words is a feasible proposition.

The Receptive Vocabulary Size of Adult Native English Speakers

Researchers are beginning to reach a consensus regarding the average receptive vocabulary size of native English speakers. A fairly recent study by Zechmeister, Chronis, Cull, D'Anna and Healy (1995) indicates that the receptive size of a college-educated native English speaker is about 17,000 word families, about 40% more than first year college students, who know about 12,000 word families. A word family consists of a base word and its inflected forms and derivations (Nation, 2001, p. 8).

Zechmeister, Chronis, Cull, D'Anna and Healy (1995) express their reservations even about these numbers, cautioning us that they may still be overestimations of the actual vocabulary sizes, as they used a dictionary-sampling method and a multiple-choice testing of word knowledge, which is permissive of a certain amount of guessing. They also speculate that researchers "who have taken a rather pessimistic view toward a role for direct instruction in increasing lexicon size have tended to overemphasize the total number of words that could be known" (Zechmeister, Chronis, Cull, D'Anna & Healy, 1995, p. 202).

Based on previous research, Nation and Waring (1997) estimate that the receptive vocabulary size of a university-educated native English speaker is around 20,000 base words, while Goulden, Nation, and Read's (1990) intervention indicates that the receptive vocabulary size range of college-educated native English speakers is 13,200 - 20,700 base words (Goulden, Nation, & Read, 1990), with an average of 17,200 base words.

Can Adult Non-native English Speakers Acquire a Receptive Vocabulary Size Comparable to That of Native Speakers?

An average size of 17,000 word families suggests that the "learning burden" of the task associated with direct English vocabulary teaching to non-native speakers is not as daunting as once believed. Exceptional adult second language learners do achieve vocabulary sizes that are like those of educated native speakers. A recent study (Cervatiuc, 2007) suggests that the average receptive vocabulary size of highly proficient university-educated non-native English speakers ranges between 13,500 and 20,000 base words, being comparable to that of university-educated English native speakers (Table 1).

The participants in Cervatiuc's study were 20 adult independent immigrants, who arrived in Canada after the age of 18 and who managed to re-access the professions they had in their home countries. The group average age upon arrival was 28.95 years and the group average length of residence in Canada 11.55 years. Cervatiuc (2007) used the same instrument to assess receptive vocabulary size as Goulden, Nation, and Read (1990), namely the Webster Third Vocabulary Size Test.

Table 1. Comparison between the findings of Cervatiuc's (2007) study and those of Goulden, Nation, and Read (1990)

	Cervatiuc's study (2007) Sample: 20 highly proficient non-native speakers	Goulden, Nation, and Read's study (1990) Sample: 20 university-educated native speakers
Receptive English vocabulary size range	13,500 - 20,000 base words	13,200 - 20,700 base words
Receptive English vocabulary size average	16,512 base words	17,200 base words

Goulden, Nation, and Read (1990, p. 356) also take an optimistic stance, which supports the feasibility of learning an extensive vocabulary in a second language:

Clearly, estimates of vocabulary size of adult native speakers which credit them with vocabularies of 216,000 words (Diller, 1978) or 80,000 words (Miller & Gildea 1987) are greatly inflated. It is more likely that the average educated native speaker has a vocabulary of around 17,000 base words and has acquired them at the average rate of about two or three words per day. If native speakers do in fact acquire vocabulary at this relatively slow rate, it would seem that for second language learners, direct teaching and learning of vocabulary is a feasible proposition.

A longitudinal study by Milton and Meara (1995) found that adult learners of English as a second language could learn 2650 base words per year. The study involved 53 European exchange students on Lingua and Erasmus program in a British university. Most students were studying management science and some were studying English language and literature teaching. The Eurocentres Vocabulary Size Test (EVST) (Meara & Jones, 1990) was used as a pre-test and as post-test after six months later.

A vocabulary acquisition rate of 2650 base words per year would allow adult learners of English as a second language to achieve a native-like vocabulary size of 17,200 base words in 6.49 years. This rate may not be representative of the average English as a second language learner, since the participants in Milton and Meara (1995) were top students and exceptional learners, but it suggests that acquisition of a native-like vocabulary size in a second language as an adult learner is an achievable goal.

Which Words Should ESL Teachers Focus on First?

Since some words are so rare and knowing them will not make a big difference in understanding written texts, recent research has suggested that it is better for learners at the beginning of their second language acquisition journey to focus on learning the most frequent words first and then move on to acquiring the vocabulary related to their interests and needs. The focus of lexical research on beginning ESL learners is not on average vocabulary size, but on learning the "right words".

Lexical studies suggest that some words are more frequent than others, therefore more useful for second language learners. Decades of corpus research and the advent of online text databases motivated some researchers to focus on identifying the most frequent words that are necessary to understand a written text. Francis and Kucera (1982) suggest that the 2000 most frequent word families of English make up 79.7% of the individual words in any English text, the 3000 most frequent word families represent 84%, the 4000 most frequent word families make up about 86.7%, and the 5000 most frequent word families cover 88.6%.

By knowing the 2000 most frequent word families of English, readers can understand approximately 80% of the words in any text. Therefore, the goal of an English learner should be to acquire these 2000 word families first, since this relatively small number of words is recycled in any piece of writing and ensures the basis for reading comprehension.

Acquiring vocabulary at random does not necessarily ensure that the most needed and frequent words are learned before less frequent and useful words. Cobb (2007) suggests the fast-track alternative of learning the 2000 most frequent word families from online frequency-based word lists linked to dictionary explanations. In order to simulate rich natural contexts, Cobb's (2007) publicly available computer program displays word lists linked to a software providing concordances, which are authentic contexts for each word, derived from a large collection of texts.

While using computer-provided contexts may not be as powerful as meeting words in natural contexts, Cobb (1997) suggests that "using computer concordances can get the learning process off to a good start". ESL teachers can incorporate the use of lexical concordances in their practice, either by facilitating computer-assisted vocabulary teaching if their classroom environment provides access to online technologies or by preparing printed handouts of concordances for the 2000 most frequent words.

However, knowing only the 2000 most frequent word families or 80% of the words in a written text gives a second language learner only a general idea of what is being said in a text, without ensuring deep reading comprehension. A much better reading comprehension power is ensured if a reader knows the meanings of at least 90% of the words in a text.

Nation and Waring (1997) suggest that by knowing the 2000 most frequent word families, plus the Academic Word List (AWL), a second language reader would understand about 90% of the words encountered in any academic text. There are approximately 570 words in the Academic Word List (AWL) and they are also available online and linked to concordances (Cobb, 2007). After teaching the 2000 most frequent words, ESL facilitators can use Cobb's online resources to address the words from the Academic Word List.

Even if understanding only 90% of the words in a text does not ensure ideal reading comprehension, it is a foundation on which second language learners can build on by subsequent reading, more advanced vocabulary instruction, and exposure to natural contexts.

Conclusion

Teachers of English as a second language and curriculum developers may want to consider creating teaching materials and designing units in accordance with word frequency lists and concordances in order to approach vocabulary instruction in a principled and systematic way that is informed by research findings.

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