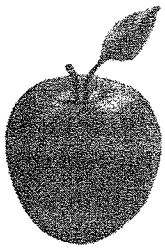

# Vocabulary Learning and Teaching

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"Vocabulary Learning and Teaching" focuses initially on current issues in teaching, i.e., deciding which items to teach and how to teach them; on explicit and implicit learning and vocabulary learning strategies; and on the role of collocations. The other focus is recent corpus studies and their implications for analysis of multiword phrasal units and for new directions in vocabulary instruction.

## INTRODUCTION

Vocabulary learning is central to language acquisition, whether the language is first, second, or foreign. Although vocabulary has not always been recognized as a priority in language teaching, interest in its role in second language (L2) learning has grown rapidly in recent years and specialists now emphasize the need for a systematic and principled approach to vocabulary by both the teacher and the learner. The increased interest in this topic is evidenced by a rapidly expanding body of experimental studies and pedagogical material, most of which addresses several key questions of particular interest for language teachers. For example, what does it mean to know a word? Which words do learners need to know? How will they learn them? These questions reflect the current focus on the needs of learners in acquiring lexical competence and on the role of the teacher in guiding them toward this goal.

## HISTORICAL OVERVIEW

There is now general agreement among vocabulary specialists that lexical competence is at the very heart of communicative competence, the ability to communicate successfully and appropriately (Coady and Huckin 1997). Given the current focus on vocabulary study, many nonspecialists might be surprised to learn that, in past years, this area of teaching was often neglected because it was thought that vocabulary could simply be left to take care of itself. Although by the late 1970s and early 1980s more and more voices began to challenge this view (Judd 1978; Meara 1981; McCarthy 1984; Laufer 1986), in 1988, Carter and McCarthy were still taking note of the relative neglect of vocabulary in previous years. By then its reputation as the poor relation in language teaching was rapidly coming to an end.

The low status of vocabulary study and vocabulary teaching was in large part due to language teaching approaches based on American linguistic theories that had been dominant throughout the 1940s, 1950s, and 1960s. Most influential in the early years was Charles Fries's *Teaching and Learning English as a Foreign Language* (1945), based on American structural linguistics, which emphasized grammatical and phonological structure. Fries believed that grammar should be the starting point of language learning, and he also adopted the view, borrowed from behaviorist psychology, that learning was a matter of habit formation. His audiolingual method incorporated these ideas by paying systematic attention to intensive drills of basic sentence patterns and their pronunciation. Because the emphasis was on teaching grammatical and phonological structures, the vocabulary needed to be relatively simple, with new words introduced only as they were needed to make the drills possible (Larsen-Freeman 2000b; Zimmerman 1997). The assumption was that once students learned the structural frames, lexical items to fill the grammatical slots in the frames could be learned later, as needed.

Although the shift to generative (transformational) linguistics in the 1960s brought about revolutionary changes in linguistic theory, triggered by Chomsky (1957), it did little to challenge the idea that the role of lexis was secondary to that of grammar. Chomsky rejected the behaviorist notion of habit formation and supplanted it with a rationalist framework, the central assumption being that language is represented as a speaker's mental grammar, a set of abstract rules for generating grammatical sentences. The rules generate the syntactic structure, and lexical items from appropriate grammatical categories (noun, verb, adjective, etc.,) are selected to fill in the corresponding slots in the syntactic frame. The interests of generative linguists centered mainly on rule-governed behavior and on the grammatical structure of sentences and did not include concerns for the appropriate use of language. Language learning approaches based on this theory viewed learning as rule acquisition, not habit formation, and emphasized grammatical rules. Vocabulary was afforded somewhat more importance, but the focus on rules of grammar still served to reinforce the idea that lexis was somewhat secondary (Carter and McCarthy 1988).

Hymes (1972), while not rejecting Chomsky's model, extended it and gave greater emphasis to the sociolinguistic and pragmatic factors governing effective use of language. Hymes was especially concerned with the concept of *communicative competence,* which emphasized using language for meaningful communication, including the appropriate use of language in particular social contexts (for example, informal conversation at the dinner table versus formal conversation at the bank, etc.). The teaching approach that evolved from these notions (see also Halliday 1973), referred to as communicative language teaching, promoted fluency over accuracy and consequently shifted the focus from sentence-level forms to discourse-level functions (e.g., requests, greetings, apologies, and so on). Once again, though, vocabulary was given secondary status, taught mainly as support for functional language use. As in previous approaches, it was generally assumed that vocabulary would take care of itself (Schmitt 2000).

This picture has changed dramatically within the last two decades. The challenge to the status quo began in the late 1970s and early 1980s, and by the late 1980s and early 1990s, vocabulary studies were developing exponentially and vocabulary teaching was coming into its own. One reason for the resurgence of interest on the part of researchers was that computer-aided research was providing vast amounts of information that had not previously been available for analysis, such as information about how words behave in actual language use, larger units that function in discourse as single lexical items, and differences between written and spoken communication. Further, psycholinguistic studies were providing insights concerning mental processes involved in vocabulary learning, such as memory, storage, and retrieval. Interest in these issues led in turn to related studies concerned with developing more effective vocabulary teaching and learning strategies.

## CURRENT ISSUES

A central debate emerging from these studies deals with whether effective vocabulary learning should focus on explicit or implicit learning. In the 1970s and 1980s, the communicative approach led naturally to a focus on implicit, incidental learning. Teachers encouraged students to recognize clues to word meanings in context and to use monolingual dictionaries rather than bilingual dictionaries, and textbooks emphasized inferring word meaning from context. Currently, however, while acknowledging that exposure to words in various contexts is extremely important to a deeper understanding of a word's meaning, most researchers recognize that providing incidental encounters with words is only one method of facilitating vocabulary acquisition, and that a well-structured vocabulary program needs a balanced approach that includes explicit teaching together with activities providing appropriate contexts for incidental learning.

### Explicit Learning

In explicit vocabulary learning students engage in activities that focus attention on vocabulary. Sökmen (1997) highlights several key principles of explicit learning that can help guide teachers in deciding basic questions of what to teach and

how to teach. These principles include the goal of building a large recognition vocabulary, integrating new words with old, providing a number of encounters with a word, promoting a deep level of processing, facilitating imaging, using a variety of techniques, and encouraging independent learning strategies.

## What to Teach

How do we decide how many words to teach and which ones to teach? Many researchers now advocate that learners should initially be taught a large productive vocabulary of at least two thousand high frequency words. Meara (1995), for example, argues against earlier "vocabulary control" approaches in which students were taught only a basic vocabulary of several hundred words, and read restricted sorts of texts such as language textbooks and graded readers. He maintains that students should learn very large vocabularies when they first start to acquire a language. In fact, this base of two thousand words now seems to be the most commonly cited initial goal for second language learners.

The justification for this view is that, first, any given language has a small number of words that occur many times in material we see most often and a large number of words that occur only once or twice. The actual figures for English suggest that a basic vocabulary of about two thousand words accounts for approximately 80 percent of what we regularly see or hear. For almost any common context, a learner restricted to five hundred words or so would encounter a very large number of unfamiliar words and the really important meanings would be carried by the words that the learner is not likely to know. Meara concludes that a vocabulary of five hundred words is relatively useless, while a vocabulary of two thousand words goes a long way towards achieving a realistic level of lexical competence. A second reason why it would be sensible to teach beginners a very large vocabulary very quickly is that most learners expect to have to learn vocabulary, and it would be a mistake not to capitalize on these expectations.

The most famous list of high-frequency words is the *General Service List of English Words* (West 1953). It contains about two thousand words with semantic and frequency information drawn from a very large corpus of several million words and, though quite old, has still not been replaced. It is often cited as the most useful list available because it lists the different parts of speech and the different meaning senses and, in terms of frequency, gives the frequency of the main headword plus the relative frequency of its meanings (Nation 1990; Sökmen 1997; Schmitt 2000). It has been very influential, perhaps because "it is claimed that knowing these words gives access to about 80 percent of the words in any written text and thus stimulates motivation since the words acquired can be seen by learners to have a demonstrably quick return" (Carter 1998, p. 207). However, it is based on very old word counts and is currently being revised.

Some researchers also emphasize that, for certain groups of students, a base of two thousand words will be inadequate. Learners with special goals, such as university study, need to acquire a further one thousand high-frequency words beyond the initial two thousand base, plus the strategies to deal with the low-frequency words they meet. A list to consider for academic English is the *Academic Word List*, in an appendix in Nation (1990), updated in Coxhead (2000).

Another very important consideration is that we can maximize vocabulary considerably by teaching word families instead of individual word forms. A word family is a set of words that includes a base word plus its inflections and/or derivations. For purposes of teaching, especially, it makes more sense to view sets such as *talk, talked, talking,* and *talks* as members of a closely related "family," not as four single words, and to help students recognize them as such. Presenting word families, with many words built around a particular root, gathers words together so that associations among them can be seen. The psychological literature also supports this view, providing evidence that the mind groups members of a word family together. An important implication is that when we think of teaching a productive vocabulary of two to three thousand "words," we should actually be thinking in terms of word families as the unit for counting and teaching (Schmitt 2000).

Meaning associations attached to words are also important. Words appear to be organized into semantically related sets in the mind, and thus the associations attached to a word will affect the way that it is stored in the brain. Psychologists investigate these associations by presenting subjects with a word and asking them to suggest other words that it brings to mind. For example, they present the word *table* and ask what other words first come to mind. For *table,* the most common association is *chair;* for *boy* it is *girl,* and so on.

## Teaching Techniques and Activities

New words should not be presented in isolation and should not be learned by simple rote memorization. It is important that new vocabulary items be presented in contexts rich enough to provide clues to meaning and that students be given multiple exposure to items they should learn. Exercises and activities include learning words in word association lists, focusing on highlighted words in texts, and playing vocabulary games. More recently, computer programs that include the sounds of the words as well as illustrative pictures provide opportunity for practice with a variety of contexts, both written and spoken.

Especially at beginning levels, the teaching of word lists through word association techniques has proven to be a successful way to learn a large number of words in a short period and retain them over time. Nation (1990) notes, for instance, that knowing *meaning* and *hopeful* can make the learning of *meaningful* easier. This result should not be surprising, given that words are associated in various ways and that these associations reflect underlying relationships in the mind. That is, as noted previously, the meaning of a word depends in part on its relationship to similar words, and words in a word family are related to each other through having a common base.

Semantic mapping is an activity that helps bring into consciousness relationships among words in a text and helps deepen understanding by creating associative networks for words (see especially Stahl and Vancil 1986). A text is chosen based on the words to be learned and students are asked to draw a diagram of the relationships between particular words found in the text. A variation on this technique, a "vocabulary network," could be designed to help even beginning students learn to make semantic associations within particular superordinate headings. As a somewhat simplified example, consider a text describing a scene with a red house, a blue sky, and a yard with green grass and puppies and kittens playing on it. The teacher could first discuss the chosen words, provide superordinate category headings such as *animal* and *color* in circles on the chalkboard, and then help students learn to illustrate the relationships among the words by having them first identify the related words in the text, then draw circles below each category heading connected by associative lines, and finally write the appropriate related words in the circles connected to the headings (e.g., *animal* connected with *puppy* and *kitten* in associated circles; color connected with *red, blue,* and *green* in associated circles).

Word association activities can also be constructed with lists of words that are to be learned. For example, students could be given word-match lists such as the following and asked to draw lines from words in the left column to those that seem most closely related in the right column.

| | |
|---|---|
| cough | blue |
| grass | pepper |
| red | tea |
| salt | kitten |
| puppy | sneeze |
| coffee | green |

The pairs to be matched should have a clear associative link, such as those given in the list, but closely related synonyms or antonyms should probably be avoided. Research shows that similarities between words can make learning more difficult because of interference, or "cross-associations." In particular, care should be taken with pairs whose meanings are very similar. Learners can easily confuse pairs such as *left* and *right,* for example, because they have the same semantic features except for "lateral direction." Research indicates that 25 percent of similar words taught together are typically cross-associated. Antonyms are a particular problem because they tend to

come in pairs such as *deep/shallow* and *rich/poor.* Synonyms and other closely related semantic groupings (food, clothing, body parts) are also problematic. The way to avoid cross-associations in closely related semantic groups is to integrate new words with old by teaching the most frequent or useful (i.e., "unmarked") word first (e.g., *deep*), and only after it is well established introduce its less frequent ("marked") antonym partner (e.g., *shallow*) (Nation 1990; Schmitt 2000).

For presenting word families, one way is simply to introduce such a family along with the definitions for each word, as for example, the derivational set *act, action, active, actively, activate, actor.* Another way to isolate the word families that occur in a particular text is by highlighting them so that students can see the relationships. Highlighting passages in texts has the advantage of providing a more natural context in which students can trace words through the discourse and observe how the forms change according to discourse function. Texts may be authentic materials or, for initial learning, may be simple but natural texts constructed by the teacher. For example:

> A *conductor* of an orchestra must spend years studying music and must also learn how to *conduct* other musicians so they can play together. The proper *conduct* of each musician will contribute to the success of the performance.

Another consideration in teaching vocabulary is promoting a deep level of processing. The reason is that learning may involve either *short-term memory* or *long-term memory.* Short-term memory has a small storage capacity and simply holds information temporarily while it is being processed, usually for only a matter of seconds. The importance of promoting a deep level of processing is to transfer information from short-term memory to long-term memory, which has almost unlimited storage capacity. The more students manipulate and think about a word, the more likely it is that the word will be transferred into long-term memory. Research indicates that efficient learning of vocabulary is an incremental process, one that requires meaningful recurring encounters with a word over time. With respect to classroom activities, for instance, a semantic mapping or other semantic network activity could be followed later with pair matching activities, along the lines illustrated earlier. For suggestions on how to use word set grids and other gamelike tasks for more advanced learners, see Carter (1998).

Teachers can add variety to the techniques employed in the classroom by alternating other activities with language games that recycle vocabulary, e.g., Scrabble, Word Bingo, Concentration, Password, Jeopardy. Language games have the added advantage of being fun, competitive, and consequently, memorable. These games are also activities that students can be encouraged to do on their own.

## Implicit Learning

Incidental vocabulary learning is learning that occurs when the mind is focused elsewhere, such as on understanding a text or using language for communicative purposes. A common view in vocabulary studies is that we have not been explicitly taught the majority of words that we know, and that beyond a certain level of proficiency in a second language, vocabulary learning is more likely to be mainly implicit (incidental). Various researchers have concluded that learners should be given explicit instruction and practice in the first two to three thousand high-frequency words (i.e., word families), while beyond this level, most low-frequency words will be learned incidentally while reading or listening. The reason that explicit learning is thought to be necessary in the initial stages is that, unless a high percentage of words on a page are known, it is very difficult to guess the meaning of new words from context. A two to three thousand word base is considered a minimum "threshold" that enables incidental learning to take place when reading authentic texts.

Just as having multiple exposures to a word is important in explicit learning, so it is important for incidental learning. Lack of exposure is a common problem facing language learners; a good way to combat this problem is to expose students to extensive reading, sometimes referred to as a "book flood" approach, in which reading is done consistently over a period of time. For beginning students, graded readers will probably

give the best access to a large amount of input. For intermediate students just on the threshold of reading authentic texts, it may be appropriate to read numerous authentic texts, but all on the same topic (narrow reading) so that the texts will provide multiple exposure as topic-specific vocabulary is repeated throughout. Advanced students, on the other hand, should be encouraged to read a wide variety of authentic texts (wide reading). This type of exposure is important because meeting a word in different contexts expands what is known about it, thus improving quality of knowledge, with additional exposures helping to consolidate it in memory. Given an incremental view of vocabulary acquisition, both elaboration and consolidation are crucial (Schmitt 2000).

## VOCABULARY LEARNING STRATEGIES

Incidental learning from exposure to texts will be greatly facilitated if learners use vocabulary learning strategies. These strategies will undoubtedly be required initially, in any case, as students are encouraged to make the transition to independent learning by determining meanings of the less frequent words they read or hear. Strategies should aid both in discovering the meaning of a new word and in consolidating a word once it has been encountered. Thus, learners should approach independent learning of vocabulary by using a combination of extensive reading and self-study strategies.

### Guessing Meaning from Context

One of the strategies most often discussed in the literature is guessing word meaning from context. Making the transition to independent learning can be easier and more efficient if teachers help students learn to recognize clues to guessing word meaning from context. This strategy is a key vocabulary learning skill for dealing with low-frequency vocabulary, particularly in reading authentic texts.

Factors that affect the likelihood of success in inferencing include a context rich enough to provide adequate clues to guess a word's meaning. Because many contexts are not rich enough, a single context is often not sufficient to allow students to guess the full word meaning. This fact underscores the need for repeated encounters with a word in diverse contexts. It is clear, of course, that background knowledge about the topic and the culture greatly aid inferencing and retention by providing a framework ("schema") for incorporating the new word with information already known, but even without such a background learners can become skilled in guessing. The key is to learn what clues to look for and where to find them.

Clarke and Nation (1980) propose a guessing strategy based on such clues (also in Nation 1990). A beginning step is to get the learner to look closely at the unknown word, next to look at its immediate context, and then to take a much broader view of how the clause containing the word relates to other clauses, sentences, or paragraphs. Clarke and Nation also include a system for learners to check that the guess they made was the best one possible.

The basic steps in this system include first deciding the part of speech of the unknown word (e.g., noun, verb, adjective, adverb), and then examining the context of the clause or sentence containing the word. For instance, if the unknown word is a noun, what adjectives describe it? What verb is it near? If the new word is a verb, what nouns does it go with? Is it modified by an adverb? If the new word is an adjective, what noun does it go with? The next step is looking at the relationship between this clause or sentence and other sentences or paragraphs. Signals to look for might be a coordinating or subordinating conjunction such as *but, because, if, when* or an adverbial such as *however,* or *as a result.*

Even if there is no explicit signal, it is helpful to be aware of the possible types of rhetorical relationship, which include cause and effect, contrast, inclusion, time, exemplification, and summary. Punctuation may also be helpful as a clue, since semicolons often signal a list or an inclusion relationship, and dashes may signal restatement or clarification. Reference words such as *this, that,* and *such* also provide useful information if the antecedent can be identified.

Final steps include using knowledge gained from such clues to guess the meaning of the word, and then checking in the following ways to see if the guess is correct: See if the part of speech of the unknown word is the same as that of the guess; if so, replace the unknown word with the guessed word; if the sentence makes sense, the guessed word is probably a good paraphrase for the unknown word. As a final check, break the unknown word into its prefix, root, and suffix, if possible, to see if the meanings of the prefix, root, and suffix correspond to the guessed word; if not, check the guessed word again but do not make changes if it still seems to be the correct choice.

The steps in this strategy focus mainly on context rather than looking at word parts, a step that is delayed until last. The reason is that, in the experience of Clarke and Nation, using affixes and roots alone is not a very reliable aid to guessing, whereas using the context is more likely to lead to correct guesses.

An important assumption of this procedure is that, once the strategy is mastered, learners can begin to skip some of the steps and the other steps will become more automatic. A second assumption is that guessing word meanings in context also leads to dictionary work, but only as a final way of checking since learners will often be unable to choose the most suitable meaning from those given unless they already have some idea of what the word might mean.

## Mnemonic Devices

Among various other strategies often discussed in the literature, one that requires a considerable amount of manipulation and deep processing is the *Keyword Method,* an aid to memory, or a "mnemonic device," which helps to link a word form and its meaning and to consolidate this linkage in memory. There are three stages. First, the learner chooses an L1 or L2 word, preferably a concrete entity, based on a phonological or orthographic similarity with the L2 target word. Then a strong association between the target word and the keyword must be constructed so that, when seeing or hearing the target word, the learner is reminded immediately of the keyword. Finally, a visual image is constructed to combine the referents of the keyword and the target word, preferably an odd or bizarre image that will help make it more memorable (Hulstijn 1997).

The important point to remember is that the student must learn to concentrate on remembering the image of the interaction between the keyword and the foreign word. An example cited by Kasper (1993) illustrates this point. The target word is the Spanish word *payaso* ("clown"), and the keyword is the English *pie.* The association between the target word and the keyword is to think of the image of a clown throwing a pie at a friend. Students can also be encouraged to draw simple pictures with stick figures to illustrate the image and thus further aid memory—in this case, stick figures representing the clown and the friend, with the pie in midair between them.

## Vocabulary Notebooks

A further suggestion for a memory aid in independent learning is setting up vocabulary notebooks. Schmitt and Schmitt (1995) recommend arranging the notebook in a loose-leaf binder or index card file, in which, for instance, students write word pairs and semantic maps which help them visualize the associative network of relationships existing between new and familiar words. Other activities related to the notebooks include keeping a tally of every time they hear or see a new word within a certain period and noting its frequency, learning roots and derivatives in the word's family by studying what affixes are used to change its part of speech, making notes on stylistic aspects of the word, or writing a sentence illustrating its use.

## Other Learner Strategies

Various other learner strategies can help in discovering word meaning and in consolidating it in memory. Teachers can encourage students to check for an L1 cognate, study and practice in peer groups, connect a word to personal experience or previous learning, say a new word aloud when studying, use verbal and written repetition, and engage in extended rehearsal (review new material soon after initial learning and then at gradually increasing intervals).

It is, of course, neither possible nor desirable for learners to try to use all strategies all the time, but they may find it useful to vary strategies that seem more appropriate to a given situation, for example, depending on whether the context is explicit classroom learning activities or independent learning such as reading or speaking. Often, individual preferences will determine strategy use.

## COLLOCATIONS

So far we have considered vocabulary only in terms of single words and word families. However, vocabulary knowledge involves considerably more than just knowing the meaning of a given word in isolation; it also involves knowing the words that tend to co-occur with it. These patterns, or *collocations,* consist of pairs or groups of words that co-occur with very high frequency and are important in vocabulary learning because, as Nattinger notes, "the meaning of a word has a great deal to do with the words with which it commonly associates" (1988, p. 69). These associations assist the learner in committing these words to memory and also aid in defining the semantic area of a word.

If collocational associations are not learned as part of L2 vocabulary knowledge, the resulting irregularities will immediately mark the learner's speech or writing as deviant or odd in some way and as decidedly non-native. Native speakers of English, for example, refer to "spoiled" butter as rancid butter and "spoiled" milk as sour milk, but not as **sour butter* or **rancid milk.* A few examples of wrong word combinations that have occurred in non-native speech are **feeble tea, *laugh broadly, *hold a burial,* and **healthy advice* (Bahns 1993).

It is also important for learners to recognize that collocational relationships are not equally powerful in both directions, so that *rancid* strongly suggests the collocate *butter,* for instance, but *butter* only weakly suggests *rancid,* if at all. Thus *rancid* does not readily co-occur with other nouns, but *butter* can co-occur quite freely with any number of other adjectives, such as *sweet butter, soft butter, dairy butter, unsalted butter, creamy butter, tasty butter, artificial butter,* and so on. The word in the combination that is restricted in this way, such as *rancid* or *sour,* is known as the "key" word of the collocation. The key word does not always occur as the first word in the collocation, as for example, the key word *fire* in *set/start a fire,* but not **begin/commence/initiate a fire.*

Very commonly, collocations are associated pairs such as adjective-noun or verb-noun, but it is misleading to think of them in terms of pairs only. One reason is that they often occur as multiword linear sequences three to five words long, e.g., *a short-term strategy, to pay attention to something/someone.* Another reason is that a collocate member may co-occur with a cluster or range of words, rather than being limited to one word with which it pairs. Thus even a highly restricted pair member such as *rancid* co-occurs with several other nouns, mainly *rancid lard, rancid oil, rancid dressing* (as in salad dressing). Likewise, *sour* co-occurs with other nouns, as in *sour cherries, sour apples* (i.e., describing the taste of nonsweet fruit, or a similar non-sweet fruit taste in certain candy), or even metaphorically, as in *sour note, sour disposition.* However, the range of restricted collocates for words like *rancid* and *sour* is quite limited. We do not normally say, for instance, *rancid cheese, rancid jam, rancid syrup* or *sour meat, sour beets, sour fish.*

These restrictions may at first glance seem to present additional learning problems to overcome, but in fact they may be incorporated into vocabulary study as useful aids in learning. This is what Nattinger has in mind when he maintains that collocational associations assist the learner in committing these words to memory and help in defining the semantic area of a word. Concerning collocational associations as memory aids, researchers have noted that vocabulary is best learned in context and that words that are naturally associated in a text are more easily learned than those having no such associations.

### Semantic Associations

With respect to their usefulness in helping to define the semantic area of a word, note that in the examples discussed earlier the words in each collocational range are clustered according to certain semantic features they have in common. For instance, *rancid* co-occurs with *butter, lard, oil,*

*salad dressing,* all of which have in common the semantic feature of "oily" as part of their base, thus disallowing *rancid cream, rancid milk, rancid cheese, rancid jam, rancid syrup.* Similarly, *sour* co-occurs with *milk* or *fruit,* having in common the semantic feature "type of bad taste" or "tart taste," both of which are associated with causing the lips to pucker, thus disallowing *sour butter, sour lard, sour meat, sour beets, sour fish, sour tomatoes.*

Teachers can exploit these characteristics of restricted collocational clusters by presenting them in contexts in which they naturally occur and by pointing out the semantic links among them. Notice also that the words in these clusters, while having semantic features in common, are not so similar as to be a likely cause of confusion. Recall the cautionary note mentioned earlier concerning the problem of cross-association when teaching closely related semantic pairs or groups such as synonyms and antonyms. Cross-association difficulties are not likely to be caused by these clusters because, although the collocational members have associated semantic links, their meanings are not nearly as closely associated as are synonyms or antonyms, which either have very similar meanings or have only one opposing feature.

## Syntactic Collocation Types

Collocations fall into two main syntactic groups. They may be either *grammatical collocations* or *lexical collocations.* Grammatical collocations are those in which a noun, verb, or adjective frequently co-occurs with a grammatical item, usually a preposition. Examples are *reason for, account for, rely on, afraid of, leery of, by accident, in retrospect.* Lexical collocations differ in that they do not contain grammatical words, but consist of combinations of full lexical items, i.e., nouns, verbs, adjectives, and adverbs. They include combinations such as verb + noun (*spend money, inflict a wound*), adjective + noun (*rancid butter, dense fog*), verb + adverb (*laugh loudly*), and adjective + adverb (*deeply absorbed*).

Bahns (1993), in a contrastive study of collocations, reports that learners seem to rely on a "hypothesis of transferability," whereby the majority of collocational errors found in learner English can be traced to L1 influence. Examples are **drive a bookshop* instead of *run a bookshop,* based on influence from a Polish equivalent; **make attention at* instead of *pay attention to,* from a French equivalent; and **finish a conflict* instead of *resolve a conflict,* from a German equivalent. Bahns recommends that, whenever possible, it would be helpful to identify those collocations (of the set to be learned) that a learner with a particular L1 background "knows already" because of an equivalent in the L1 and in English. Teachers could then help students focus on identifying the differences for a chosen group of semantically equivalent L1/L2 pairs.

## Teaching Activities

As we have seen in the previous discussion, collocations play an important role in vocabulary learning. "Knowing a word" includes not only knowing the meaning of a word, its part of speech, and its word family and other associations, but it also means knowing if its occurrence is restricted by certain collocations. And if so, it also means knowing the range of these collocational patterns (for a more detailed discussion of various collocational sets, ranges, and restrictions, see Carter 1998, Chapter 3). For more advanced learners, knowing a word should include at least some knowledge of collocations to the extent possible.

Classroom activities can be designed for this purpose. For example, following presentations in which collocations have been illustrated in context, perhaps by highlighting them in passages from texts, word-match activities can help in consolidating the patterns. As an illustration, a noun such as *intellect* can be given with lists of adjectives with which it does and does not co-occur, with directions to circle the appropriate collocates and then check answers against a key given on a separate sheet.

He has a { keen / sharp / high / superior / exceptional / strong / healthy } intellect.

key: keen, sharp, superior, exceptional

A similar matching exercise can be constructed for verbs (*introduce* collocates with *a person, a bill, a motion, an amendment,* but not *an idea, an object, a conclusion*), for adjectives (*likely* collocates with *choice, prospect, story, tale,* but not *article, memoir, belief*), and so on.

Gap-filling activities provide another type of practice. Students are asked to choose all possible words from a thematically related list, some of which will be needed more than once, and some of which will not be needed at all. For example:

job work labor occupation
position task employment

**a.** That job requires hard physical _____.
**b.** In today's _____ market, computer skills are important.
**c.** I'll meet you for dinner after _____ today.
**d.** You need to concentrate on the _____ at hand.
**e.** What line of _____ are you in?
**f.** Her chosen _____ is carpentry.
**g.** He was promoted to a supervisory _____.

Finally, with respect to *when* collocations should be introduced, a word of caution is in order. For vocabulary instruction in the earliest stages, some researchers recommend that collocations not be included at all. They represent a more advanced type of word knowledge that should be left to higher-level students who are enhancing and consolidating vocabulary already partially learned. Beginners should focus instead on developing a large basic vocabulary and learning the typical contexts in which the words occur.

## Idioms

In the previous section, collocations were discussed in terms of restricted pairs or sets of multiword combinations. Restrictions on patterns are described in terms of key words and the range or set of associated words that can co-occur with them. Not all collocational patterns are entirely equal, however, as some are relatively more "fixed" than others.

Idioms are multiword units that are completely fixed. They are further distinguished as having a unitary meaning that cannot be derived from the meanings of the component parts. That is, the combination of words in *blow one's mind* have the unitary meaning *astonish;* those in *be under the weather* have the unitary meaning *feel ill.* This unitary meaning is the main characteristic that sets idioms apart from ordinary collocations, in which the meanings do reflect the meaning of each constituent part.

It is the unitary meaning of idioms that makes them particularly troublesome for second language learners since the meaning cannot normally be guessed by the meaning of the words that make them up. Learners are likely to be mystified by idioms such as *to let the cat out of the bag* (to reveal a secret), *to shoot the breeze* (to engage in casual conversation), *to shed crocodile tears* (to be insincere), or *to bite the dust* (to die). On the other hand, they are likely to be entirely misled by what appears to be a transparent literal meaning of other idioms such as *to have cold feet* (to lack courage), *to have second thoughts* (to have doubt), *to tighten one's belt* (to be more economical), or *to have a good heart* (to be a kind person).

Idioms are a commonly occurring type of multiword unit in English, especially in informal conversational settings, and should not be ignored in vocabulary studies. Activities for the classroom could include presentation in authentic texts, such as daily newspaper cartoons/comic strips and dialogues from modern drama, and exercises that match idioms and their meanings, similar to the matching activities suggested earlier for other types of collocational units.

# RECENT DEVELOPMENTS

## Corpus Studies

Recent developments in corpus studies have led to major changes in language description and have greatly expanded our knowledge of collocations, idioms, and other multiword units (see especially Sinclair 1991). One problem in teaching collocations, for example, is deciding which

ones ought to be included. Researchers have pointed out that, given the huge number of possible collocations for even a limited number of words, there needs to be some principled way to limit the total to a manageable number. Data from corpus studies have provided new possibilities for finding solutions to such problems.

Computers have made possible the collection of huge databases of language ranging in length from short phrases or sentences up to entire books. These corpus studies allow access to a variety of samples from language as it is actually used in real-world settings in a wide range of genres, both written and spoken. One of the most often cited studies is the COBUILD project (The Collins-Birmingham University International Language Database), with a corpus of many millions of words. This project has also produced several dictionaries and grammars, including a dictionary of collocations.

One insight from corpus studies is that many words collocate with other words from a definable semantic set. This insight gives teachers guidance by providing another criterion for choosing which collocational sets to include in vocabulary lessons. Stubbs (1995), for instance, shows that *cause* typically collocates with unpleasant things such as *problems, difficulties, trouble, damage, death, pain, anguish,* and *disease.* Conversely, *provide* collocates mainly with positive things such as *insights, information, services, aid, assistance, support,* and *money.* This difference can be highlighted with the word *work.* To *provide work* is considered a good thing, but to *cause work* is not.

The results of corpus studies has been incorporated into recent dictionaries such as the *Collins COBUILD English Dictionary* (1995) or the *Dictionary of Selected Collocations* (Hill and Lewis 1997). Advanced learners can be encouraged to use these dictionaries themselves to look up collocations for particular words they may encounter incidentally in reading or elsewhere. Also, teachers can refer to such dictionaries to select collocational sets for words chosen from frequency lists for explicit vocabulary studies.

Another innovation from corpus research concerns Sinclair's observations of patterns that extend beyond the collocational units themselves. In particular, there are cases in which a word that is chosen guides and constrains the lexical choices several words away. Schmitt (2000) discusses this discourse patterning in relation to the word *sorry.* He describes various contexts and patterns for this word and notes that, for example, one of its collocates is *so,* creating the sequence *so sorry.* If the concordance data from the corpus are examined more carefully, however, it turns out that the patterning is much more restricted.

The main occurrences of *so sorry* are in two patterns, one with *so sorry to* and one with *so sorry for.* The former is usually followed by some inconvenience the speaker regrets having caused, such as being late or troubling someone. An example is *I'm so sorry to have to ask you these personal questions.* The latter, on the other hand, is normally followed by a reference to people who have experienced some type of unfortunate situation such as injury or loss of a loved one, and it tends to cluster with some form of the verb *feel,* as in *I feel so sorry for that dead boy's family.* Schmitt notes that, from this perspective, we see that words are not chosen in isolation, but rather, can have ramifications some distance away from their actual placement in the discourse.

While it is difficult to see how this sort of patterning could be taught explicitly, it does seem worthwhile to at least point it out in vocabulary lessons. If learners are made aware of such patterns as part of the context in which collocations occur, they can then be encouraged to pay attention to similar patterns in the context of new words they encounter.

## Lexical Phrases

*Lexical phrases* represent another common type of multiword unit. Nattinger and DeCarrico (1992) define lexical phrases as "chunks" of language of varying length, conventionalized form/function composites that occur more frequently and have more idiomatically determined meaning than language that is put together from scratch. Some are completely fixed expressions such as *by the way, how do you do?, give me a break.* Others are relatively fixed phrases that have a basic frame with slots for various fillers. They include shorter

phrases such as *a ___ ago,* or longer phrases or clauses such as *the ___er X, the ___er Y; If I X, then I'll Y.* Examples with the slots filled are *a year ago; a month ago; the higher the mountain, the harder the climb; the longer you wait, the sleepier you get; if I hear that one more time, I'll scream.*

Lexical phrases are types of collocations and they are more or less idiomatic (e.g., more so in *by the way, how do you?,* but less so in *the higher the mountain, the harder the climb*). However, they differ from idioms and other ordinary collocations in that each is associated with a particular discourse function, such as expressing time, greetings, relationships among ideas, or condition. The evidence from various studies, especially computer analyses of texts, indicates that lexical phrases and other prefabricated units are pervasive in language.

## Types of Lexical Phrases

In order to make lexical phrases more pedagogically useful, they have been classified according to function and grouped into three broad categories. A few representative examples are the following (for more detailed lists of types and functions, see Nattinger and DeCarrico 1992):

**Social Interactions**

greetings/closings: *hi; how are you?; what's up?/ gotta run now; see you later*

politeness/routines: *thanks so/very much; if you don't mind; if you please*

requesting: Modal + Pronoun + Verb phrase (i.e., *would/could you [mind] X?*)

complying: *of course, sure thing; I'd by happy to; no problem (at all)*

etc.

**Necessary Topics**

language: *do you speak X?; how do you say/spell X?; I speak X (a little)*

time: *when is X?; to X for a long time; a X ago; since X; it's X o'clock*

location: *where is X?; across from X; next to X; how far is X?*

shopping: *how much is X?; I want to buy/see X; it (doesn't) fit(s)*

etc.

**Discourse Devices**

logical connectors: *as a result (of X); nevertheless; because (of) X; in spite of X*

temporal connectors: *the day/week/month/year/before/after X; and then*

qualifiers: *it depends on X; the catch here is X; it's only in X that Y*

relators: *on the other hand; but look at X; in addition; not only in X but Y*

exemplifiers: *in other words; for example; to give you an example*

etc.

In general, social interactions and discourse devices provide lexical phrases for the *framework* of the discourse, whereas necessary topics provide them for the *subject* at hand. These phrases are the primary markers which signal the direction of discourse, whether spoken or written. When they serve as discourse devices, their function is to signal, for instance, whether the information to follow is in contrast to, in addition to, or an example of information that has preceded. Those such as *on the other hand, but look at X* signal contrast; *in addition, moreover* signal addition; *it depends on X, the catch here is X* signal qualification of previous comments, and so on. When lexical phrases serve as social interactional markers, on the other hand, their primary function is to describe social relations and, in general, to help structure discourse in ways appropriate to maintaining social relations.

## Why Teach Lexical Phrases

Lexical phrases offer various advantages for teaching conversation and other types of discourse. For example, because they are stored and retrieved as whole chunks, they allow for expressions that learners may as yet be unable to construct creatively. Thus even for lower level learners, they can help ease frustration and promote motivation and a sense of fluency. These phrases also ought to

prove highly memorable, since they are embedded in socially appropriate situations. More importantly, they provide learners with an efficient means of interacting with others about self-selected topics.

Another advantage in teaching lexical phrases is that they can first be learned as unsegmented wholes, together with their discourse functions, and in later encounters can be analyzed and learned as individual words, thus providing additional vocabulary.

### Teaching Activities

One way of teaching lexical phrases is to start with a few basic fixed routines, which learners then analyze as increasingly variable patterns as they are exposed to more varied phrases. Thus, practice with a few phrases in appropriate contexts can be followed by pattern drills as a way of promoting fluency with certain basic fixed routines. The challenge for the teacher is to use such drills to allow confidence and fluency, yet not overdo them to the point that they become mindless exercises, as was often the unfortunate result in strict audiolingualism.

The next step is controlled variation in using these basic phrases with the help of simple substitution drills to demonstrate that the chunks learned previously are not invariable routines, but instead patterns with open slots. For example, in teaching formulas for sympathy, the phrase *I'm (really/so) (very) sorry to hear (that/about) X* can be introduced first as, *I'm sorry to hear that you can't come to the party,* followed later by substitution drills with more expanded patterns, such as *I'm very sorry to hear that you had the flu,* and then later on, *I'm really very sorry to hear that there was a death in your family.* To highlight the appropriate variation for given contexts, the first version should be practiced in the context of minor inconvenience (missing a party), the second, a more serious misfortune (having an illness), and the third, a very unfortunate situation (a death or other personal tragedy). Nattinger and DeCarrico (1992) also provide suggestions for incorporating lexical phrase activities into listening or reading classes (see especially Chapter 6).

### Lexical Approaches

Whereas Nattinger and DeCarrico emphasize that current texts and teaching approaches can be adapted to include lexical phrases, some applied linguists have recently promoted approaches that take lexis itself as the basis for organizing the syllabus or the overall teaching approach (Sinclair and Renouf 1988; Willis 1990; Lewis 1993; 1997). The basic organizing principle of these approaches is the frequency and usefulness of words and word combinations.

Lewis (1993), for instance, concentrates on lexical chunks themselves as the foundation of teaching. For Lewis, "language consists of grammaticalised lexis, not lexicalised grammar," and language teaching needs to develop awareness of and ability to "chunk" language successfully (p. vi). Common words are common precisely because they occur in so many expressions.

Lewis stresses the importance of learning chunks of language made up of lexico-grammatical patterns, a large number of which are prepatterned and can be used by learners in formulaic, rehearsed ways. These chunks include lexical phrases, but also include other types of collocations, such as nouns learned in appropriate chunks with adjectival and verbal collocations, verbs learned with probable adverbial collocates, common metaphors and metaphor sets, and so on.

## CONCLUSION

Lexical competence is a central part of communicative competence, and teaching vocabulary a central part of teaching language. While some questions remain concerning how to teach and what to teach, considerable progress has been made concerning the issues of explicit versus implicit learning, which strategies to teach, and which and how many lexical items to include in initial instruction. Recently, corpus studies have yielded important insights concerning the nature of lexis. As these studies continue to expand investigations into patterns of lexis in discourse, they hold great promise for exciting new directions in vocabulary learning and teaching.

## DISCUSSION QUESTIONS

1. In the past century, vocabulary was a neglected area of study in the ESL/EFL classroom. Discuss several reasons for this period of neglect as well as the major influences that resulted in the current emphasis on vocabulary study.
2. Should more emphasis be given to explicit or implicit vocabulary learning at the beginning level? At more advanced levels? Why do you think so?
3. From your own experience, either as a teacher or as a learner of an L2, which vocabulary learning strategies or combination of strategies do you feel would be the most effective for incidental learning? Which do you feel might be more helpful in motivating students to learn vocabulary at a faster rate while at the same time helping them to consolidate words in long term memory?
4. Do you agree that collocations, idioms, and lexical phrases should be included in vocabulary study? Why or why not? If they are to be included, what are some of the difficulties that need to be considered? What are some possible solutions?
5. Explain some of the ways in which insights from corpus studies provide guidance for incorporating collocations and other patterned phrases into vocabulary teaching and learning.

## SUGGESTED ACTIVITIES

1. Select ten words and compare their entries in three or four dictionaries. What differences do you find in the definitions? Does it seem to you that some entries would be more useful than others for second language learners? Why?
2. Select and evaluate a vocabulary text according to the following criteria:
   a. Do the words seem to you to be frequent and useful ones?
   b. Are at least some words presented in sets of word families, either inflectional or derivational?
   c. Does the text involve explicit learning only?
   d. Does it include suggested strategies for implicit learning?
3. Select one beginning reading text and one advanced reading text. From one chapter in each, identify ten lexical items that you think might present problems for learners. Discuss how you would approach teaching these lexical items, first for the beginning level learners and then for the more advanced learners.
4. Explain how you would use the following dialogue to teach more advanced learners various lexical phrases as appropriate to particular types of contexts.

   *Situation:* The two speakers are acquaintances who work for the same company and live in the same apartment building, but are not close friends. [Mary knocks on John's apartment door.]

   J: Well, hello, Mary. What a surprise.

   M: Hello, John. (1) *I'm sorry I didn't call before coming over* (apology), but my phone is out of order.

   J: Oh well, (2) *that's OK* (acceptance of apology). (3) *Come on in* (invitation).

   M: Look John, the real reason I came over is that I need a favor. I have to catch a plane to Chicago and I just discovered my car has a flat tire. (4) *I wonder if you would mind terribly driving me to the airport right away* (request).

   J: (5) *Sure thing* (compliance), Mary. I know you'd do the same for me.

   M: (6) *Thanks so much.* (7) *You saved my life!* (6 and 7: expressing gratitude)

# FURTHER READING


**Learning Strategies**

Nation, I. S. P. 1990. *Teaching and Learning Vocabulary.* Boston, MA: Heinle & Heinle. (Also good for classroom activities and exercises.)

Schmitt, N. 1997. Vocabulary learning strategies. In *Vocabulary: Description, Acquisition, and Pedagogy, edited by* N. Schmitt and M. McCarthy. Cambridge: Cambridge University Press.

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**Classroom Activities and Exercises**

Allen, V. F. 1983. *Techniques in Teaching Vocabulary.* New York: Oxford University Press.

Gairns, R., and S. Redman. 1986. *Working with Words: A Guide to Teaching and Learning Vocabulary.* Cambridge: Cambridge University Press.

Redman, S., and R. Ellis. 1989. *A Way with Words. Book 1.* Cambridge: Cambridge University Press.