What's Important to Know About Words of Written Language?

Elfrieda H. Hiebert TextProject & University of California, Santa Cruz

> TextProject Article Series July 2014

TextProject, Inc.

SANTA CRUZ, CALIFORNIA

Hiebert, E.H. (2012). What's important to know about words of written language. In M. Hougen & S. Smartt (Eds.), *Fundamentals of Literacy Instruction and Assessment, Pre-K–6*. (pp.138-149). Baltimore, MD: Paul Brookes Publishing.

What's Important to Know About the Words of Written Language

Hi. *Namaste. Konnichiwa*. You'll recognize that first word as an informal way English speakers greet one another. The second word will be familiar to Hindi speakers and yoga aficionados, while Japanese speakers will recognize the third. All of these words mean the same thing, but their spellings and sounds have developed independently and distinctly as a function of their respective languages. English is an unusual language in that it has assimilated patterns and words from multiple languages. The language source influences how a word is constructed (its orthography or spelling) and it also influences how a word is related to other words (its morphology or meaning). Understanding the language sources of English helps in teaching students to read and will also improve your own reading.

This chapter develops three ideas about how the origins of English words influence reading: (a) knowing about a word's origin helps in understanding its structure and meaning, (b) English has many words, a small number of which are used often and many of which are used rarely, and (c) the often-used words have some special features that can challenge beginning readers and English language learners (ELLs).

Objectives:

After studying this chapter, you will be able to:

- Describe a brief history of the English language and the primary sources of its vocabulary;
- 2. Explain the relationship of the origin of a word to its morphology or structure;

- Teach students the words that occur most frequently in English and recognize words that are rarely used;
- 4. Understand characteristics of words that can challenge beginning readers and English language learners, including polysemy, parts of speech, and idioms,

The Origins of English

Linguists have followed large groups of languages back to their common beginning in Indo-European roots. About 130 languages are of Indo-European origins, including Latin, French, Norwegian, Dutch and Spanish. But the commonalities of many of these languages are only visible to the experts. From the point of view of modern speakers, it's fair to say that languages, such as English, Hindi, and Japanese, are completely separate systems. One derives no advantage in English for knowing Hindi or Japanese. Other languages are related in ways that we can see and hear. They may have developed in close physical proximity or may have been derived from the same source. That's why people who speak Spanish can often understand people who speak French. These two languages, along with Italian and Portuguese, are part of the Romance language family. This family of languages is derived from Latin. When Italian speakers say *buon giorno* and French speakers say *bonjour*, they can easily understand each other.

Likewise, when Germans speakers say *guten tag* and Dutch speakers say *goededag* they understand each other. German and Dutch are considered West Germanic languages. Although you might not find it easy to understand German or Dutch, English is in fact part of the West Germanic family of languages. If you have doubts about the relationship, listen to the resemblance between *guten tag, goededag,* and *good day.*

The pyramid in Figure 1 has been developed to convey the story of English. The history of English begins from the bottom of the pyramid and moves upward.

<insert Figure 1: Pyramid>

Over 2,000 years ago, the English Isles were populated by the Celts, tribes of Celtic was not part of the Indo-European language family but was a unique language. For the next thousand years, the island was subjected to a series of invasions, and each time the invaders left part of their language and culture in England. In 54 C. E. the Romans, led by Julius Caesar, invaded, departed, then returned and stayed in England for about 400 years, speaking Latin. Many of the old English towns were named after the Latin word for camp, *castr*, such as *Manchester*, *Rochester*, *and Lancaster*.^{*i*}

German base

West Germanic tribes, the Jutes, Angles, and Saxon, moved into the British Isles as the Romans were withdrawing around 410 A.D. The Germanic groups terrorized England, driving the Celts to the northern and western edges of the island (currently Ireland, Scotland, and Wales). The Germanic invaders spoke Anglo-Saxon, often referred to as Old English. Their vocabulary consisted of everyday words to suit their daily agrarian life: *sheep, earth, plough, dog, wood, field,* and *work* as well as basic words such as *the, is, you.*^{*ii*}

Early English was very close to German. There are still many other English words that are similar in meaning, sound, and orthography to German words such as *heart/Herz, house/Haus,* and *bear/Bär*. The most common words in English continue to be derived from this German base.

Between 750 and 1050 England was once again invaded, this time by the Scandinavians, called Vikings. Although extremely destructive, sacking and plundering monasteries, they

blended in with the Anglo-Saxons and, rather than obliterating the language, added to it. The ancient poem, *Beowulfⁱⁱⁱ*, and the language of "middle-earth" in the recent *Lord of the Ring* series by J. R. R. Tolkien^{iv} illustrate this blend of the Nordic and Anglo-Saxon languages.

French accoutrement

The English language went through a massive transformation as a result of the Norman Conquest in 1066 when William the Conqueror defeated England. William was French and insisted that French be the official language. During the 350 years that France dominated English, French was spoken by the upper classes, high-ranking members of the clergy, the leaders of fashion and haut-cuisine, and members of the legal profession. The working classes continued to speak Anglo-Saxon. More than 10,000 French words entered the English vocabulary and most are still in use today.^v Examples of these words include *gentleman, faithful, parliament, and prologue*.

In 1399 Henry IV ascended to the throne of England. After a series of successful wars against the French, Henry IV declared that English was to be the official language. However, English had changed in some important ways from the original language spoken by the Anglo-Saxons because of the many French words that had been added to the lexicon. This change can be seen in the middle of the pyramid where words of French origin are located. For the most part, French enriched the areas of literature and academe, while having less effect on everyday conversation. That's why many of the words that are called "academic" are recognizable to speakers of Romance languages.

Latin and Greek

Latin, the language of the early Roman invaders and also the basis for Romance languages, again entered the English lexicon during the Renaissance. Scholars turned to Latin

when they were developing ways to categorize and describe information such as the physical environment. Evidence of how these scholars were with Latin terms can be seen in the system for classifying birds. Consider, for example, the name for a wonderful (but not exotic) bird--the white-breasted nuthatch. This bird is classified as: Animalia (kingdom), Chordata (phylum), Aves (class), Passeriformes (order), Sittidae (family), Sitta (genus), and Carolinensis (species).

Europe was also undergoing a great revival of Classical learning during the Renaissance. Scholars who wanted to show their Classical training often drew on the original sources of words in Greek to name new inventions (e.g., *telescope*, *microscope*). Medical and musical terminology was often derived from Greek, including words such as *chorus* and *physician*. The number of Greek-origin words may be small but these words are central to learning in the sciences and social sciences. The Greek influence can be seen at the top of the pyramid.

This short history is not just of academic interest. Knowledge of the origin of a word assists readers of English in understanding how new words are generated and also the formation or structure of words. The history of English has resulted in many English words that have similar meanings; the simple everyday words are Anglo-Saxon and the more sophisticated and nuanced words from the Romance languages. Take, for instance, ways of describing the feeling of a driver who was cut off on a highway. The driver might be described as *mad* or *upset* (Anglo-Saxon words) or as *infuriated* or *irate* (Romance words). As teachers, we want to move our students' vocabulary beyond *mad*, *glad*, and *sad* to *infuriated*, *joyful*, and *miserable*. To guide students in extending their vocabularies, professionals need knowledge about words with different language origins are formed (morphology) and how words are connected to one another (semantic clusters). The language source of a word also helps figure out spelling and pronunciation. But, with three languages that each has its unique letter-sound patterns, the story

of English letter-sound correspondences is sufficiently complex that I will leave that topic to other authors in this book.

Morphology

Morphology refers to the ways in which words are formed in a language. Words with both German and Roman origins add inflected endings (e.g., *happens, happening, happened*). Inflected endings serve grammatical functions but do not change the fundamental meaning of the word. Inflected endings are part of the topic of morphology but the ways in which words for unique concepts are formed in a language is the essence of morphology. All three of the languages that contribute to English generate words in different ways, as was evident with the examples related to the word *cold* (which is the Anglo-Saxon word) in the language pyramid in Figure 1.

Anglo-Saxon has a large group of root words, many of which are relatively short words (e.g., *cat*, *cow*, *coat*, *creek*, *church*, *sheep*, *earth*, *plough*, *wood*, *field*, *work*). Some Anglo-Saxon words add endings (suffixes) such as *-less* or *-ful* are used with Anglo-Saxon words (e.g., *hopeless*, *handful*) and an even smaller group of prefixes, among them *a-* (*alike*), *un-* (*unlike*), and *dis-* (*dislike*). But when a new object or event enters into a Germanic language, it is represented by a compound word. Evidence comes from the many new words that have been generated as part of the world-wide web (itself a compound phrase): *firewall*, *bandwidth*, *bookmark*, *home page*, *listserv*. In Germanic languages, two root words combine to form a new word that has a related but unique meaning from the root words. In German, a long string of words can be fused together to form a new word such as *Windschutzscheibewaschanlage* (which means *windshield wiper squirting device*) but, typically, only two words are used to form a new English word.

Some of the words spawned by the world-wide web are compound words made by adding an Anglo-Saxon word to a word of Greek origin (e.g., *hyperlink*) or of Romance origin (e.g., *internet*). But such compounding with Romance words is not how new words are formed in Romance languages typically. When new words themselves are generated in Romance languages, it is done through adding prefixes and/or suffixes around a meaning base, often called a root word. Anglo-Saxon words do have, as already noted, some derivational morphology (e.g., *"un"* in *unchecked* or "*a*" in *asleep*) but those constructions are vastly outnumbered by the prolific Romance derivational morphologies (e.g., *attend*, *attention*, *attentive*, *inattentive*). Thus, once students know the meaning of a root word and several prefixes and suffixes, they can usually figure out what the new word means. For example, if a student knows that the root word *dict* refers to saying words, they can use context clues to determine the meaning of words such as *diction*, *dictate*, and *dictionary*.

In Greek, two root words of equal weight form a new word. While this process resembles the Anglo-Saxon way of compounding, the Greek root words retain their distinctive meanings in the new word that is not usual with compound words with Anglo-Saxon roots. The two Greek roots that make up the word *cryotherapy* retain the meaning of cryo (cold) and therapy (cure). In cryotherapy, low temperatures are used as a means of treatment for a disease or pain. In the compound word with Anglo-Saxon origins—*cold-hearted*—an individual's heart has not been subjected to low temperatures. The expression is figurative, implying that someone lacks feeling or sympathy. The Greek contribution to English is much smaller than that of Romance or Anglo-Saxon words and its word formations follow straightforward rules. Greek roots traditionally do not function independently.

Semantic clusters

Semantic clusters are words with similar though nuanced meanings. The example on the pyramid of *cold* and *frigid* illustrate how, to this day, our language is divided into parallel vocabularies. Many words overlap in meaning, which allows for us to make subtle distinctions that include but are not limited to connotation (good/bad), register (formal/informal), and intensity (high/low). Words derived from Anglo-Saxon (*church, clothes, food,* and *law*) exist along side similar words that are derived from French (*religion, fashion, cuisine,* and *attorneys*). A challenging activity to do with your students is to ask them the difference between words that have similar, yet different meanings. What is the difference between *hungry, famished* and *starved? Thin, emaciated,* and *slender? Tired, fatigued,* and *exhausted?*

Romance words, such as *religion* and *cuisine*, tend to be more formal and appear more frequently as part of our written language as the vocabulary of content areas and literature. This is not surprising when you consider that French was the language of the ruling class in England after the Norman Conquest, as was Latin when Britain was under Roman rule. All the while, Anglo-Saxon remained the language of the people. Romance words are many but the Anglo-Saxon words continue to make up the bulk of the words of English texts and conversations—the topic of the next section.

All English words are not used equally

The pyramid's tapering rise suggests the distribution of total English words according to their language of origin. Anglo-Saxon words outnumber the Romance words, not only in terms of sheer vocabulary size but also with regard to frequency of usage. For example, among the 25 most frequent words in English (which account for 33% of the words that appear in written language) all are Anglo-Saxon in origin. With few exceptions the other 75 words that are on the list (below) can be traced to their Anglo-Saxon roots. This group of 100 words accounts for

around half of the words in written English^{vi}. This percentage holds for texts that children read as well as those read by adults in chapters such as this one.

<insert Table 1 here: 100 Most-Frequent Words in Written English>

The English lexicon has been stocked with vocabulary from two distinct language sources, which means English has more words than most other languages. This presents both an embarrassment of riches for writers and an Everest-like climb for second language learners. However, there is good news for the latter group. This overwhelming mass of English verbiage can be boiled down to a very small group of words that does most of the heavy lifting. This is a form of linguistic efficiency that is described by Zipf's^{vii} Law, which can be summarized thusly: The most frequent words are used many times more often that the least frequent words.

All the words in English are not represented in Figure 2 but the figure accurately illustrates the distribution. English words fall into three groups, according to frequency: (a) highly frequent (zones 0-2), (b) moderately frequent (zones 3-4), and (c) rare (5-6).^{viii} This information is based on the frequency with which as word is predictably used in a million-word sample. The most frequently used words form a relatively small collection (930). These words are likely to occur at least 100 times per one million words of text. They contain the many functional words that help us form grammatical statements without regard to content, such as articles, pronouns, auxiliary verbs, prepositions, etc. This very small group of words accounts for almost two-thirds of the words in a text, including this chapter. In the last sentence, for example, numerous words are in this group: *this, very, small, group, of words, for almost, two, the, that, in, a.*

The moderately frequent words form an appreciably larger group of approximately 4,900 words. We can expect to encounter these words at a rate that varies from 10 to 99 times per one

million words. This group of words is full of names and basic concepts that would be known by an average fifth-grader. Examples of words that fall into this group in this paragraph are *million*, *average*, and *fifth*.

Words in zones 5-6 reflect increasingly infrequent usage. In word zone 5, there are approximately 14,000 words. These words appear from 1 to 9 times per million words of texts. In the last three sentences, these words are *reflect*, *infrequent*, and *zone*.

The remaining words fall in zone six and includes literally thousands of words. These words are the "specialty" words of English and appear less than once per million words of text. These are words such as *usage*, *gradations*, and *functional* in the last few paragraphs. In the analysis on which Figure 2 was based, there were approximately 135,000 such words. According to the British National Corpus^{ix} the lexicon used in schoolbooks does not reflect our total vocabulary. The British National Corpus put the number of unique words in English as 750,000 words, most which fall into the last zone where words occur less than once per one million (or even ten million) words. Many of these words are archaic ones that aren't used in written text anymore (e.g., *alack, thole, forby*) or the inflected endings of archaic words (e.g., *tholes*).

This analysis of words begs the question of what is a word and how it should be counted. Think of a word rich in multiple meanings, such as the word "set." I can set the table, set you right, build a set, buy a bedroom set, collect a set, set the glue, create a set, do things in a set way, etc. The first thing we might notice is that the various meanings would not be used at the same frequencies. Another issue involves derivations, words that are made by adding suffixes and prefixes to a word base (e.g., *preset*, *reset*).

Derivations were mentioned previously as primarily a feature of the words that have come into English from French. The number of words we create by derivations gets increasingly

larger as the language continues to grow. An estimate is that, in the middle grades and beyond, more than 60% of the new words that readers encounter have relatively transparent morphological structure—that is, they can be broken down into parts.^x When students realize that large, challenging words may be made up of smaller words that they know, students are able to break the large word into the smaller words and determine its meaning.

The vastness of English vocabulary raises the question of what should be taught. The rare words are often the ones that give a text its unique meaning, such as *sponges*, *rubbish*, *weird*, *dolphins*, *flicked*, *cove*, *swords*, and *snouts* in the children's book *Turtle Bay*.^{*xi*} There are also many words that are unique to academic texts such as *focus*, *majority*, *communication*, and *extension*. Content, literary, and academic words are, in fact, typically the focus of lessons in guidebooks for teachers. In chapter X on vocabulary, you'll learn how to thoughtfully choose which words to teach students, when to teach the words, and how to teach the new words.

In thinking about students who are learning to read, whether they are young children or ELLs who are recent immigrants. Authors of books for children and teachers often expect that readers know the highly frequent words or that the words are easy to learn. But, as I discuss in the section that follows, that is not always the case. Teachers and tutors need to be aware of some features of the high frequency or core vocabulary that can create challenges in comprehension and word recognition.

The features of the core vocabulary

The words within core vocabulary are the most frequently used words, and one reason they are used so frequently is because they make themselves very useful. Part of their usefulness is a result of their versatility, i.e. they can be used in multiple ways. This versatility is a product of three characteristics, namely: (a) polysemy, (b) parts of speech, and (c) and idiomatic

language. These characteristics create challenges for striving learners. In teaching and tutoring, an awareness of these characteristics can go a long way toward supporting student growth as strong readers and effective communicators.

Polysemy

Many of the most common words in a language have multiple meanings, a feature that is called polysemy (from Greek *polusēmos* having many meanings). Consider the word *set*, which has 464 definitions according to the *Oxford Unabridged Dictionary*. That is an unusually high number, but quite a few everyday words (e.g., *find*, *change*, *good*, *check*, *play*) have a surprising number of nuanced, or distinct, meanings.

Polysemy has been identified as a factor that inhibits word learning. Words that share the same root but have different meanings (e.g., *comprehensive* and *comprehensible*) can be particularly challenging to learn^{xii}. When ELLs have been asked to guess the meanings of English words, they have had trouble with polysemous words. It's possible that exposures to a word with multiple meanings do not create the conditions for meaning to be inferred. The definition of a word with a single meaning can be reinforced over a variety of contexts, even if the sense of the word's meaning remains vague and cannot be articulated. Furthermore, researchers^{xiii} found that readers who were familiar with one meaning of a polysemous word tended to cling to that known meaning during reading even when it was clear it did not make sense in that particular context. In this way, the known definition prevented other definitions from being considered, leaving these readers worse off than if the word had been completely unknown to them.

There are several delightful books that have been written to highlight the polysemous nature of words. One is a series about a maid called Amelia Bedelia^{xiv} who consistently interprets

a request on the part of her employers with the wrong meaning of a word. When asked to *dust* the living room, she finds a jar of face powder and covers the surfaces in the living room with it. Fred Gwynne (who was also famous as a character in the *Munsters*) has written several books that even high-school students find humorous (and can use as the impetus for creating cartoons and illustrations). Gwynne's books—with titles such as *The Sixteen-Hand Horse*^{xv}—are illustrations of a child's perceptions of the expressions that she hears. Some of the child's confusion comes from polysemous words, while others are words that have similar pronunciations but different spellings (e.g., *The king who rained*). The content reinforces the need to recognize that the most common words in English are not necessarily straightforward in their meaning.

Parts of speech

Polysemous words often take on different parts of speech as well as meaning changes. For example, some meanings of the word *set* function as verbs, as in *set an example* or *set the vase down*. In other situations, the word *set* functions as a noun, as in *a set of dishes* or *a TV set*. These words are considered homonyms because they are spelled and pronounced the same way, but they mean different things.

In addition to the homonyms mentioned above, there is a particular group of homographs (same spelling, different sound) with dual meanings that are linked to part of speech. Such homographs, as *lead*, *record*, and *desert* often change from nouns or adjectives to verbs. The slight changes in pronunciation—usually a shift in stress—signal the change in meaning. Despite the difference in part of speech, the words remain very closely related in meaning. If you want to have a *record* of a meeting, someone must *record* the minutes. Other grammar rules can create addition functions for these words; for example, a noun can be used as a verb, which then turns

in an adjective (participle). Also bedeviling are word pairs like *affect* and *effect*, which include a slight spelling change that is tied to part of speech. This is another way that versatility raises the bar on language proficiency.

Idioms

If I told you that "I'm not hanging noodles on your ears"^{xvi}, you'd probably be puzzled. But if repeated that expression in Russian to a Russian speaker, it would be easily understood. On the other hand, if I said in Russian, "I'm not pulling your leg," a Russian speaker would probably be baffled. These phrases, which defy literal translation, are examples of idioms. Incidentally, both expressions mean, "I'm not lying to you."

For ELLs, idioms are especially challenging. It's not that they don't know what idioms are. They do and could give examples in their own language. But they have a difficult time recognizing idioms in English, and when they do, they do not necessarily understand the meaning. The meanings of the individual words considered literally often seem far-fetched and even silly. Non-native speakers are likely to question their own comprehension before realizing they have hit upon an unfamiliar idiom such as *it's raining cats and dogs* or *does the cat have your tongue*.

Idioms are much less frequent in informational texts where language is more precise and less colloquial. But they are plentiful in stories, where figurative use of language is common. In fact, some idioms are literary in nature, for example, "sour grapes" or "crying over split milk." The origin of these expressions is fairly straightforward, at least to those of a certain age. Yet the origins of most idioms are lost in the mists of time, and most people who repeat idioms would be hard pressed to explain them.

Idioms develop over time as a form of cultural shorthand. The word *idiom*, like the word

idiosyncratic, shares the same Greek root "idio," which means "private, personal, or peculiar." The use of idioms in common speech and informal writing is ubiquitous and often automatic. Sometimes, however, idioms are deployed purposefully to declare membership in a culture or cultural sub-group. Adolescents is an example of a group that often acquires a wealth of slang filled with idioms to set themselves apart from children and adults. When adults adopt these expressions and they enter the general culture, the language loses its original cachet.

Many compound words are idiomatic as well. They use words in a figurative way to create new concepts. For example, *housebound* does not mean one is literally tied to a house nor does *tongue-tied* mean that one's tongue is physically knotted. Acronyms (e.g., *sonar*, created from **so**und **n**avigation **and r**anging), initialisms (e.g., CEO), portmanteaux (e.g., *blog*), and symbols (e.g., MHz – *Megahertz*), also fall into the category of idiomatic language too because they way they are created is somewhat arbitrary and enter the language by cultural consent. New words formed in these ways are entering the language at a rapid pace, partially as a result of new technologies: *The band's new CD was reviewed on my favorite music blog, and I've been listening to it 24/7 on my mp3 player*.

Helping students develop facility with the idiomatic expressions of language is a critical part of vocabulary development and instruction. Idioms can't be taught in their entirety so the basic instructional procedure is to assist students in becoming aware of idiomatic language in English and explore equivalents in their own native languages. However, idioms also present a challenge to native-speaking educators. This kind of language is so familiar that it becomes practically "invisible," and therefore, it takes a bit of effort to avoid using it with beginning language-learners or to call attention to it with more advanced language learners.

Cognates

It is interesting to point out that native Spanish speakers in our school systems are often able to make connections to vocabulary that is considered to be challenging by native English speakers^{xvii}. For example, Spanish-speaking children understand the word *valor* long before most American children understand the concept of valor. Other examples of common words in Spanish that have English cognates, words of similar origin, include *facile* and *edifice (fácil* and *edificio* in Spanish). Cognates have similar meanings and spellings but are pronounced differently. Native Spanish speakers who cannot read Spanish (as is often the case with the children of immigrants) need to be supported in making these connections because the pronunciations of the words can differ greatly across the languages. Once ELLs learn to read, it is easier for them to see the connections across languages than it is to hear the connections.

<insert Table 2 here: Examples of English-Spanish Cognates>

Conclusion

To sum up, English is an especially challenging language because it has draws on two primary languages—Anglo-Saxon (which is a Germanic language) and French (which is a romance language) and, in content areas such as science and social studies, a third language— Greek. The systems of each of these languages differs which means differences in the ways that words are constructed. It also means that there are often several words in English that can be used to describe the same phenomenon, as is evident in the way we can describe a drop in temperature. We can say: It's cold (Anglo-Saxon). It's frigid! (Romance). Or we can say, I'm about to become an experiment in cryogenics (Greek).

As these examples show, the three language sources permit nuances and elaboration. Therein lies the good news about English—its ability to communicate nuances and complexity. The focus is often on the challenges of English that has a puzzling letter-sound system (which

also can be traced to its multi-lingual roots). Another part of the good news—stemming from analyses made possible by analyses of large databases of words we know which words are the most frequently used and, therefore, can focus on those of highest utility to students. Focusing on these frequently used words is important because they display quite a bit of versatility in the language when they take on multiple meanings, shift into different parts of speech, and are used in creative idiomatic ways. Bearing all this in mind will help teachers guide students through the gauntlet of English vocabulary so that they can gain enough proficiency to partake in its many riches.

Application Assignments

It is interesting to point out that native Spanish speakers in our school systems are often able to make connections to vocabulary that is considered to be challenging by native English speakers^{xviii}. For example, Spanish-speaking children understand the word *valeur* long before most American children understand the concept of valor. Other examples of common words in Spanish that have English cognates include *facile* and *edifice (fácil* and *edificio* in Spanish). Cognates have similar meanings and spellings but are pronounced differently. Native Spanish speakers who cannot read Spanish (as is often the case with the children of immigrants) need to be supported in making these connections because the pronunciations of the words can differ greatly across the languages. Once ELLs learn to read, it is easier for them to see the connections across languages than it is to hear the connections.

Table 1.

100 Most Frequent Words in Written English^{xix}

1-25	26-50	51-75	76-100
the	not	people	most
of	have	them	its
and	this	other	made
to	but	more	over
а	by	will	see
in	were	into	first
is	one	yours	new
that	all	which	very
it	she	do	my
was	when	then	also
for	an	many	down
you	their	these	make
he	there	no	now
on	her	time	way
as	can	been	each
are	we	who	called
they	what	like	did
with	about	could	just
be	up	has	after
his	said	him	water
at	out	how	through
or	if	than	get
from	some	two	because
had	would	may	back
Ι	SO	only	where

Table 2.

25 Spanish-English Cognates: Words in Literary/Academic English^{xx}

Latin root	Spanish common word	English literary/academic words	English common word
arbor (tree)	árbol	arbor, arborous, arboreal, Arbor Day, arboretum	tree
avis (bird) bonus (good)	ave bonitas	avian, aviary, aviation aviator/aviatrix bonus, bonanza, bonny Phrases: bon voyage, bonafide: in good faith; bon vivant: person who enjoys good food/luxuries, bon mot: clever comment	bird beautiful
cavus (hollow)	cavar	cavern(ous), cave, cavity	dig
detinere (to keep back)	detenerse	detain, detention, détente	stop
scribere (to write)	escribir	scribe, script, Scripture, scribbler, scribble	write
frigus (coldness, frost)	frío (el)	frigid. Frigid Zones: South & North, Frigidaire (fridge), Freon: trademark for low-boiling refrigerants and solvents	cold
grandis (great)	grande	grand, grandiose, grandeur, grandiloquent, grandiflora, grandstand, grand tour Phrases: grande dame, grand monde	big
insectum	insecto	insect, insecticide, insectivore, insectile	bug
lavare (to wash)	lavar	lather, lathery, lavender (originally used as a bath perfume), lavatory, lavation, laver (large basin, also water plant), lavish	wash
liber (book)	libro	library, librarian, libretto	book
Ìuna (the moon)	luna	lunar, Luna, lunacy, lunatic, lunation, lunarian Phrases: lunar month, lunar year, lunatic fring,	moon
necessitas noctis (night)	necesitar noche	necessity, necessary, necessitate, necessarily nocturnal, nocturne	need night
observatio (attention)	observar	observe, observation, observance, obsequious	watch
primus (first)	primero	prime, primate, primal, primacy, primary, primarily, primer, primitive, primeval, primogeniture, primordial	first
re (back) spondere (pledge)	responder	response, respond; respondent; responder, responsibility, responsible	answer
regis (king)	rey/reina	regent regal, regalia, reign related words: regime, regimen, regiment, region, Rex: official title of a reigning king	king/queen
significans (meaning)	significar	significance, significant	mean
sol (the sun)	sol	solar, solstice, solarium	sun

sufficiere (to provide)	suficiente	sufficient, suffice, sufficiency	enough
terra (earth)	tierra	terrain, subterranean, terrace, terrestrial, terrene, terrarium phrases: terra firma (solid ground), terra incognita (unexplored territory), terra cotta	ground
vacare (to be empty)	vacía	vacant, vacate, vacancy, vacation	empty
valere (to be strong)	valiente	valiant, valid , value, valorous, valor	brave
venus (sale)	vender	vender, vender, vend, venal (can be bribed, corrupted), vending machine	sell

Figure 1: The historical sources of English words^{xxi}

Greek

Specialized words used mostly in science; New words formed by compounding word forms EX: cryosphere, cryotherapy

Latin/Romance

1066 (Norman Conquest) – 1399 (Henry IV): French is spoken by upper classes; English by working classes. Many French words remain. New words formed by adding affixes to roots EX: frigid, frigidity, frigidness, refrigerator

Anglo-Saxon

Common, everyday, down-to-earth words; New words formed through compounding: EX: cold, cold-blooded, cold-hearted

Figure 2: The distribution of words in American schoolbooks



^{iv} Tolkein

^v Claiborne, R. (1983). Our Marvelous Native Tongue. The Life and Times of the English Language. New York, NY: New York Times Book Co., Inc. p. 112.

^{vi} Zeno, S. M., Ivens, S. H., Millard, R. T., & Duvvuri, R. (1995). The educator's word frequency guide. New York, NY: Touchstone Applied Science Associates.

^{vii} Zipf, G. K. (1935) The Psychobiology of Language. Houghton-Mifflin ^{viii} Zeno et al. (2007)

^{ix} Leech, G., Rayson, P., & Wilson, A. (2001). *Word frequencies in written and spoken English based on The British National Corpus.* London: Longman

^xNagy, W.E., Anderson, R.C., Schommer, M., Scott, J.A., & Stallman, A.C. (1989).

Morphological families in the internal lexicon. Reading Research Quarterly, 24(3), 262-282.

^{xi}Pirotta, S. (2005). Turtle Bay. London, UK: Frances Lincoln Children's Books.

^{xii} Laufer, B. (1990). Why are some words more difficult than others? Some intralexical factors that affect the learning of words. International Review of Applied Linguistics in Language Teaching, 28(4), 293-307.

^{xiii}Bensoussan, M., & Laufer, B. (1984). Lexical guessing in context in EFL reading comprehension. Journal of Research in Reading, 7(1), 15-32.

xiv Parrish, P. (2003). Good work, Amelia Bedelia. New York, NY: Greenwillow Books.

^{xv} Gwynne, F. ((1987). The Sixteen Hand Horse. New York, NY: Simon & Schuster Books.

^{xvi}Bhalla, J. (2009). I'm not hanging noodles on your ears and other intriguing idioms from around the world. Washington, DC: National Geographic.

^{xvii} Bravo, M.A., Hiebert, E.H., & P.D. Pearson (2007). Tapping the linguistic resources of Spanish/English bilinguals: The role of cognates in science. In R.K. Wagner, A. Muse, & K. Tannenbaum (Eds.). Vocabulary development and its implications for reading comprehension (pp. 140-156). New York: Guilford.

^{xviii}Bravo et al. (2007)

^{xix} Adapted from Zeno et al. (1995).

^{xx} Hiebert, E.H. (2011). 25 Spanish-English Cognates: Words in Literary/Academic English. Santa Cruz, CA: TextProject, Inc. Permission granted.

^{xxi}Calfee, R.C. (1981-1984). The Book: Components of reading instruction (Unpublished manuscript). Palo Alto, CA: Stanford University. [Permission requested]

ⁱ Henry, M. K. ((2003). Unlocking literacy: Effective decoding and spelling instruction. Baltimore, MD: Paul Brookes Publishing Co.,

ⁱⁱ McCrum, R., MacNeil, R., & Cran, W. (2002). *The story of English* (3rd Ed.). New York, NY: Penguin.

ⁱⁱⁱ Beowulf