

## **Minimizing academic English lexicon gap between English first language students and English second language students**

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### **Abstract**

*Vocabulary, much more than grammar, is the key to any learner to understand what she/he hears and reads in school; and to communicate successfully with other people. For this reason it is very important for a learner to quickly build up a large store of words. Research studies have shown the strong links between having an extensive vocabulary and achieving school success. Lewis (1993) states that "Lexis the core or heart of language". As English Second Language students develop greater fluency in English it is significant for them to acquire more productive academic vocabulary knowledge and to develop their own personal vocabulary learning strategies. This conceptual paper aims to highlight the academic lexicon gap between English First Language students and ESL students. Moreover, it defines what academic vocabulary is and how vocabulary is learned. Finally it provides effective vocabulary teaching strategies that could be employed in the ESL classroom in order to minimize the lexicon gap between English first language students and ESL students.*

**Key words:** lexicon, lexicon gap, ESL, First Language Speakers, teaching strategies, language acquisition

### **Introduction**

The more one considers the matter, the more reasonable it seems to suppose that lexis is where we need to start from, the syntax needs to be put to the service of words and not the other way round" (Widdowson in Lewis, 1993, p. 115). Vocabulary teaching and learning is a constant challenge for teachers as well as students because historically there has been minimal focus on vocabulary instruction in the ESL classroom. Due to this, an increased emphasis on vocabulary development is crucial for the English language learner in the process of language learning. According to Colorado

(2007), the average native English speaker enters nursery school knowing at least 5,000 words while the average English language learner may know 5,000 words in his/ her native language but only a few words in English. The reality is that native speakers continue to learn new words while English language learners face the double challenge of building that foundation and closing that language gap. Table 1 below indicates how many words are needed for effective communication in a L2.

Table 1. Number of words are needed for effective communication in a L2 (Nation and New man, 1997, p. 239)

<b>Level</b>	<b>Number of Words</b>	<b>Text Coverage, %</b>
High-frequency words	2,000	87
Academic vocabulary	800	8
Technical vocabualry	2,000	3
Total to be learned	4,800	98
Low – frequency words	123,200	2
<b>TOTAL</b>	<b>128,000</b>	<b>100</b>

Technical vocabulary are words or phrases that are primarily used in a specific line of work or profession. For example, an electrician needs to know technical words such as capacitor and surge capacity, words that people outside that industry never use. Academic vocabulary on the other hand is the vocabulary critical to understanding the concepts of the content taught in schools (Stahl & Fairbanks, 1986).

Another crucial point to consider is the amount of time it takes for English language learners (ELLs) to learn English and be ready for school. While it takes one to three years for ELLs to develop Basic Interpersonal Communication Skills (BICS), they need seven years to develop Cognitive Academic Language Proficiency (CALP) (Cummins, 2000). There are a host of reasons why ELLs would be struggling with the academic content.

Firstly, the English language learners are doing two jobs at the same time; they are learning a new language (English) while learning new academic concepts. They are literally moving between two different worlds.

Secondly, ELLs have to work harder and need more scaffolding than the average native English-speaking student who has an age- and level-appropriate command of the English language. Scaffolding is providing support for students as they learn new skills or information (Cummins, 2000).

Thirdly, academic vocabulary is often very technical and less frequently used than conversational English used in the English language classroom and students are constantly required to use higher level language function such as analyzing, predicting, explaining and justification.

Due to the enormous and alarming gap between the acquisition of basic conversation English and academic English, it is therefore important for teachers in the English for Academic Purposes ESL classroom to be knowledgeable about the most effective and current teaching strategies in vocabulary instruction and provide constant academic scaffolding to ELLs.

The English for Academic Purposes classroom focuses mostly on academic language. Academic language is the language used by teachers and students for the purpose of acquiring new knowledge. Stahl and Fairbanks (1992) define academic English as the English needed for reading, writing, speaking and listening in the content areas. Hence, if students in the English for Academic Purposes classroom need a language proficiency that will enable them to comprehend academic content and participate in activities and assignments, then it is even more important for the teacher to employ effective and dynamic teaching strategies that will empower the students to master the required tasks.

### **What is Academic Vocabulary?**

Chamot and O'Malley (2007, p. 87) define academic vocabulary as follows:

Academic vocabulary is the language that is used by teachers and students for the purpose of acquiring new knowledge and skills which includes learning new information, describing abstract ideas and developing student's conceptual understanding.

Academic vocabulary is used across all academic disciplines to teach the content of the discipline; e.g. Students who study chemistry are required to know the chemistry concepts. According to Marzano (2004), academic vocabulary includes general academic terms such as analyze, infer and conclusion. It enables students to understand the concepts and content taught in schools; it is critical for students to have a deep understanding of the content vocabulary in order to understand the concepts expected throughout the content standards (Schmidt, 2005).

Academic vocabulary helps students to convey arguments and facilitate the presentation of ideas in a sophisticated manner. It prepares students for academic success by helping them preview, learn and practice vocabulary from Academic Word Lists (Cummins, 2002).

According to Cummins (2002) the main barrier to student comprehension of texts and lectures is low academic vocabulary knowledge, due to the sub-technicality of the academic language. He points out that academic vocabulary is based on more Latin and Greek roots than the daily spoken English vocabulary. Cummins (2000) also states that those academic lectures and texts use longer and more complex sentences than those used in spoken English. Cummins (2002) suggests that academic vocabulary contributes to the development of Cognitive Academic Language Proficiency (CALP) in ELLs which enables them to apply the language, using abstractions in a sophisticated manner. It also enables them to think and use language as a tool for learning.

### **How We Learn Vocabulary**

“The limits of my language are the limits of my mind. All I know is what I have words for”

– *Ludwig Wittgenstein*

### **3.3 What Does it Mean to Know a Word?**

Knowing a word is not an all or nothing situation; it is a complex concept. According to Dale (1989) the extent of knowledge a person has about individual words can range from a little to a lot and it also includes qualitative connotations about words. Dale (1989) provides a description of the extent of word knowledge in terms of 5 stages:

- 3.3.1 The student has no knowledge about the word.
- 3.3.2 The student has a general sense of the word.
- 3.3.3 The student has a narrow, context-bound knowledge about the word.
- 3.3.4 The student has a basic knowledge of the word and is able to use it in many appropriate situations.
- 3.3.5 The student has a rich, de-contextualized knowledge of the word and can use it in various appropriate situations. Knowing a word implies knowing many things about the word: its literal meaning, its various connotations, its spelling, derivations, collocations, frequency, pronunciation, the sort of syntactic constructions into which it enters, the morphological options it offers and a rich variety of semantic associates such as synonyms, antonyms, homonyms (Nagy & Scott, 2000).

For example, a learner who knows the word “write” will know that its past tense is “wrote “ and its past participle is “written.” The learner would know that “written” is spelled with double “t”. The learner will also know when and how to use the various auxiliary verbs appropriately. The learner would know that “writing” is a verb that is used in the present continuous tense and that “writing” can also serve as a noun: e.g. the writing is on the wall. The learner would be aware of the various synonyms of writing such as compose, drop a line, record, scribe and draft and also know that its collocations are subject to syntactic modifications such as write effectively and effective writing. The learner will also be able to use the word within various registers. These various aspects are related to the depth of word knowledge, which is as important as learning many words (breadth of word knowledge). English learners have been shown to be lacking in depth of word knowledge, even for frequently occurring words (Verhallen & Schoonen, 1993).

Carter (2000) mentions a number of factors involved in knowing a word: recall difficulty and interlanguage factors such as storage of these lexical items in appropriate context and the ability to recall vocabulary for active usage in speaking and writing. The ability to recognize the appropriate syntactic frames of the word,

to discriminate a basic from a peripheral lexical item and the comprehension of fixed expressions.

A crucial distinction is often made between knowing a word and using it. Knowing a word does not necessarily entail using the word automatically in a wide range of contexts since for every vocabulary dimension there is a knowledge dimension and a skill dimension. Evidence suggests that the knowledge aspect requires conscious and explicit learning mechanisms whereas the skill aspect involves mostly implicit learning and memory (Ellis, 1994). Vocabulary learning strategies therefore, should include strategies for using as well as for knowing a word.

Bybee (1985) states that words are stored in a network of items linked by shared phonological, morpho-syntactic and semantic properties and that the relative strength of any given item and its relationship to other items in the network are directly determined by the speaker's experience both using and perceiving the word. Taylor (1990) states that all associative models view vocabulary acquisition as a result of the continuous interaction between the learner's current level of cognitive functioning and the linguistic and non-linguistic environment.

Bonvillian (1997) also emphasizes that learners need a deeper and more complete knowledge of syntactic information and, in particular, the sub- categorization of words—that is, the syntactic frames that words fit into. Bonvillian (1997) points out that there are many different facets of vocabulary knowledge. If one takes as an example two synonyms , *fetch* and *carry*, it is not enough to know that both refer to the transporting of something from place to place. One must additionally have knowledge of the syntactic frame within which they are used (Bonvillian, 1997). Frase (1997) used the five-point Vocabulary Knowledge Scale developed earlier by Paribakht and Wesche (1993). In order to gain syntactic information, subjects are asked to write a sentence using the specific vocabulary item, e.g. the words *fetch* and *carry*. If a learner writes *John is fetching the bucket* and *John is carrying the bucket*, one has no way of knowing if the learner has knowledge of the subtle differences between *John is fetching the bucket for Jim*, *John is carrying the bucket for Jim*, and *John is carrying the bucket to Jim*, and, further, that *John is fetching the bucket to Jim* is not possible. According to

Frase (1997), production information may provide us with at best partial information about linguistic knowledge, but it does not inform us about a learner's knowledge of what is not possible—clearly an important part of the entire picture of what a learner knows.

Moreover, it is important to concentrate on grammatical information that is hidden in vocabulary because grammatical information is useful in inferencing, according to information provided by the Paribakht and Wesche's (1993) study. The results of the study underlined the fact that syntactic and lexical knowledge are related. Therefore, research should endeavor to understand this specific relationship in line with the vocabulary acquisition process (Wode, 1989). Gass and Ard (1987) further investigated the relationship between syntactic and lexical knowledge by observing ELLs over a specific period of time. The investigation revealed that low-level learners lacked the ability to differentiate sentences such as "*The teacher demonstrated the students the new machine and The teacher showed the students the new machine*".

However, Gass and Ard (2007) also stated that learners with a high proficiency did differentiate the two sentences. According to Gass and Ard (2007), learning happens in the following manner:

1. Learners learn a particular syntactic pattern to account for all cases of what appears to them to be a particular structural type.
2. A second step occurs when a second pattern becomes available to learners; they can then either alternate these patterns or replace the first with the second until the correct pattern is established. Thus, when additional information becomes available to learners as a function of proficiency, destabilization occurs. Destabilization of initial syntactic patterns is observed in the greater sensitivity of the more advanced learners to the relationships that exist between and among lexical items. In fact, learners acquire syntactic information through the lexicon. They may first learn lexical items as unique bits of language information with syntactic generalizations as a result, not a cause (Gas & Ard, 2007). As an initial approach to a particular lexical item, learners conceivably have a general idea of the meaning of the word and a general idea of the kinds of syntactic structures in which words occur. Increased proficiency means refinement in both of these areas.

The point to be made here is that lexical acquisition needs to be considered broadly and needs to include the semantics of lexical items as well as syntactic information. A version of this point is made by Paribakht and How (2009).

Additionally, as Henriksen (1990) points out, one needs to acquire the packaging of lexical items (i.e., the range of meaning or the appropriate references) and one needs to learn to build appropriate networks (i.e., which words are related to other words, and how, including antonyms and synonyms, semantic intensity, etc.). These are dynamic processes that continue as vocabulary learning continues and one's lexicon matures.

These dynamic processes are outlined by Henriksen (1990) through the three vocabulary development dimensions.

#### 3.4 The Partial-Precise Knowledge Dimension

A number of quantitative studies such as vocabulary size or breadth and different types of achievements tests define vocabulary knowledge as precise understanding (Hazenburg & Hulstijn, 1996). To know a vocabulary item is defined as the ability to translate the vocabulary item into the first language, to discover the correct definition in a multiple-choice task, or to paraphrase it in the target language (Hazenburg & Hulstijn, 1996). In a study of teaching methods Merry (1980) asked the informants to match L1 words with L2 words.

For measuring vocabulary size in the L2 word recognition tasks and check lists were effectively used (Palmborg, 1989). These measuring instruments were also used to make comparisons between individuals vocabulary knowledge (Beauvillan & Grainger, 1987). Herman and Anderson (1985) argue that these lexical decision tasks could only show whether a specific vocabulary item is recognized as being part of the learner's vocabulary, since learners are only required to recognize formal features of words and may not know the meaning.

In addition lexical-decision tasks do not differentiate between what the learner precisely or vaguely knows. Neuman and Koskinen (1992) used different tasks in order to measure differences in acquisition outcomes.



Read (1988) suggests a method where learners be requested to pronounce words, explain the meaning and provide various word associations. This method has shown that there are definite levels of knowledge along the partial to precise knowledge dimension.

### **3.4 The Depth of Knowledge Dimension**

The depth of the learner's vocabulary knowledge is defined as the learner's ability to apply syntactic and morphological meaning to words that they know. Richards (1993) emphasizes that vocabulary knowledge consist of various dimensions which define the meaning of words. According to Cronbach (1992), learners should not only know the general relationship between words but also the different sense relations such as antonyms, synonyms, hyponyms, and collocations.

Dolch and Leeds (1992) stress that knowing the meaning of a word is "growth." They argue that current vocabulary tests are limited and should include a section on testing word meaning and synonyms.

Wesche and Paribakht (1996) suggest the use of a vocabulary knowledge scale to measure levels of lexical knowledge such as meaning, use and accuracy. However, according to Read (1988), a learner's lexical competence can only be measured by a combination of test formats that measure the various word knowledge dimensions.

### **Effective Vocabulary Teaching Strategies**

Maera (1997) suggests that vocabulary learning is to be viewed as the learning of items and changing of systems when teachers employ the following vocabulary learning strategy:

#### **Guessing meaning from context**

The teacher assists the students in learning to recognize clues to guessing word meaning from context. This vocabulary learning skill is effective for learning low-frequency vocabulary (Herrel, 2008). Herrel (2008) suggests the following method in assisting students guessing meaning from context:

**Definition** - a definition gives the meaning of words. The writer may use phrases or statements to define something. The key words used to provide a definition are: "are/is known as," "are /is described as," "are/ is defined as".

**Restatement** - the writer may use other words, phrases or sentences to provide meaning of difficult words. The key words used in restating something: “in other words”, “that is” and “that is to say.”

**Punctuation marks** - the writer uses punctuation marks to describe the meaning of unfamiliar words. The author will write unfamiliar words and then use punctuation, words, phrases or sentences to explain new words. Punctuation marks such as - , commas, “” inverted commas, () parentheses; semi-colon and: colon. E.g. Family members (siblings) should always stick together.

**Examples** - examples help learners to understand the meaning of new words. Key words- “such as,” “like,” “for example,” “for instance,” “is/ are” , are used by the author.

**Contrast** - contrast shows the opposite meaning of new words. Key words- “but,” “instead of,” “even though,” “in contrast to”, “yet,” “and” “in spite of,” are used by the author.

**Similarity** - the writer uses signal words of similarity. Key words – “like,” “similarly,” “in the same way”, “as”, and “just as.”

**Surrounding words** - words surrounding the new vocabulary might provide clues to the meaning of new words. For example- Children are too young to understand that **swallowing** gum can be **dangerous**.

**Background knowledge** - Experience and background knowledge about the text plays an important role in vocabulary comprehension. For that reason it is important for teachers to do schema-building before learners read the text.

### **Teaching lexical chunks**

Peters (1992, p. 34) suggests that the memorization of chunks of language might be productive and powerful. She states that the learning of lexical chunks can serve two objectives: it enables the student to have chunks of language available for immediate use and it also provides the student with information that can be analyzed at a later stage. The main advantage of the use of lexical chunks is that they build on the fluency of the English language learner. They can also be associated with certain communication rituals such as “To whom am I speaking?”, “daily telephone conversations.” Lexical

chunks are related to typical functional language use. For example- “Have you heard about...” is reserved for starting gossip or talking about an event. Lexical chunks like these are institutionalized as the most efficient and most familiar linguistic means to carry out language function (Bollinger, 1997).

Lexical chunks facilitate clear, relevant and concise language use and are stored as individual whole units. These units can be easily retrieved and used without the need to compose on-line through word selection and grammatical sequencing. This means there is a less demand on cognitive capacity because the lexical chunks are “ready to go” and require little or no additional processing. Bollinger (1997) states that once a chunk is known it can be analyzed and broken down into constituent words. This can occur when some variability is noticed in a lexical chunk. For example- after having heard the phrase “How are you today?” several times, it may be acquired as a chunk with the meaning of a greeting.

However the learner may later notice the phrase “How are you this evening?” At that point the learner realizes that the main structure is actually “How are you...? Where the gap can be filled with a time reference. The learner is then aware that what fits in the gap is a separate unit from the rest of the phrase, which opens the door to learning that lexical unit (Bollinger, 1997).

## **Conclusion**

The ESL teacher can assist the academic language development of ELLs more effectively by providing them with the main topics of the curriculum, the content specific vocabulary and sentence structures related to what they learn in class. When teachers provide content specific vocabulary, ELLs have the opportunity to practice the new academic language through reading, writing and listening to it. Through personal experience during my internship at Riverside Language Program, I discovered that many of my students became discouraged because they believed that they were not making progress in their vocabulary learning journey due to the fact that they constantly compared themselves to native speakers of the English language. It is in this regard that I suggest that ESOL teachers keep portfolios of the ELLs work over the school year and help assess their students at regular intervals. Periodic assessment of ELL’s progress will show the learners their current progress and thus encourage them to work harder.

## References

- Ard, J., & Gass, S. (1987). Lexical constraints on syntactic acquisition studies in second language acquisition, *9*(2), 233-51.
- Bollinger, C. (1997). *Aspirations for excellence in vocabulary learning*. University of Michigan: Michigan Press.
- Bonvillian, R. (1997). *The development of language*. New York: Routledge Press.
- Bybee, J. L. (1985). *Morphology*: London: John Benjamins Publishing.
- Carter, A. (2000). *Language teaching*. London: Springer.
- Chanof, J. & O'Malley (2007). *Handbook of research and second language learning*. New Jersey: Lawrence Erlbaum.
- Cummins, J. (2000). *Language power and pedagogy*. Buffalo: Buffalo Press.
- Dale, T. (1998). *Engaging teachers*. UK: McGraw Hill Education.
- Dolch, S., & Leeds. J. (1992). Focus on vocabulary. London: Pearson.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Frase , L. (1997). *Vocabulary knowledge*. UK: John Benjamins.
- Gronbach, D. (1992). *Understanding reading*. London: Routledge.
- Hazenburg, S & Halstin , H. (1996). Defining a minimal receptive second language vocabulary for non-native university students, *Applied Linguistics*, *17* (2), 145-165.
- Henriksen, B. (1990). *Three dimensions of vocabulary development*. Cambridge University Press.
- Herrel. A.L. (2008). *Fifty strategies for teaching English language learners*. An ESL teacher's tool kit. 2<sup>nd</sup> ed. Winnipeg. Canada. Penguin Publishers.

Maera, P. (1997). *Designing vocabulary tests for English Spanish and other languages*. New Jersey: John Benjamins.

Marzano, R. J. (2004). *Building background knowledge for academic achievement*. Alexandria: Amazon.

Merry, R. (1980). The key word method and children's vocabulary learning in the classroom, *British Journal of Educational Psychology*, 50, 123-126.

Naggy, J. & Scolt, C. (2000). *Teaching and learning vocabulary*. London: Routledge.

Palmberg, R. (1989). What makes a word English? Swedish speaking learners' feeling of Englishness. *AILA Review*, 6, 47-55.  
Paribakht, S. & Wesche, M. (1996). *Lexical inferencing in a first and second language*. London: Multi-lingual Matters.

Read, J. (1988). *Interactive approaches to second language reading*. Cambridge: Cambridge University Press.

Richards, R. (1993). *Eminent creativity*. London: Greenwood Publishers

Schmidt, R. (2005). *Motor control and learning*. New Jersey: Human Kinetics.

Taylor, L. (1990). *Teaching and learning vocabulary*. Herefordshire, UK: Prentice Hall International.

Verhallen, J. & Schoonen, B. (1995). *Dimension of vocabulary knowledge*. London: McMillan.

Widdowson, H. G. (1993). Aspects of language teaching. *TESOL Quarterly*, 27(2), 348-349.

Wode, H. (1989). Incidental Vocabulary acquisition in the foreign language classroom. *Studies in Second Language Acquisition*, 2(2), 243-258.