

### **The role of vocabulary in ESP**

This article discusses the importance of vocabulary in ESP and its difficulties with identifying meanings in particular contexts. There are given different viewpoints of well-known scholars on specific meanings of ESP vocabulary and their approaches to learn specialized vocabulary according to their lexical meaning and function.

Key words: ESP, conceptualize, corpus-based study, corpus-linguistic approach, scale.

There is no any straightforward answer to the question “What vocabulary do ESP learners need?” as it would be met with more questions about the kind of ESP the learners are focused on, whether they all have the same goals, their level of proficiency, the context, and the amount of time available for learning. This reasonably complex area covers a wide range of teaching and research endeavors, from English for academic purposes (EAP) through to English for very particular purposes such as engineering and law. It spans everyday words that take on specialized meanings in particular contexts (think of *screen* in computer science and *mass* in physics) and words that occur in a very narrow range of usage (such as *photosynthesis*).

In the literature ESP vocabulary can be referred to by very different names from one study to another. These terms include special purpose, specialized, technical, sub - technical, and semi - technical vocabulary. Basically, such terms usually refer to the vocabulary of a particular area of study or professional use. The range of a word is important in ESP. That is, a specialized word would have a narrow range of use within a particular subject area. This means that specialized words are expected to belong to a particular subject area at university or to a professional discipline. People outside that academic or professional sphere might have some knowledge of this vocabulary but the people inside these areas of language use would be expected to be able to understand and use this language fluently. It is worthwhile keeping in mind, however, that specialized vocabulary does not always mean long Greco - Latin words or highly technical words that are not used in everyday language. Some perfectly ordinary everyday words can carry very specific meanings in particular contexts. Nation (2008) points out that *by - pass* and *neck* are high frequency words in medicine but they also occur outside that specialized context. Crawford Camiciottoli (2007) lists *market* and *price* as words that can be found in everyday language but are also used in business studies.

Vocabulary in ESP is important for several reasons. First of all, teachers and learners need to know that precious classroom time is directly related to their

language needs. They should be reading material that contains key ideas and the language of their field and writing using those ideas and language. Woodward-Kron (2008:246) carried out a lengthwise study of undergraduate students' academic writing in education and found that students' knowledge of a discipline is closely tied to the specialized language of that discipline. Secondly, understanding and using this special purposes vocabulary shows that these learners belong to a particular group that can have disciplinary knowledge from vocabulary learning. This point is particularly important if learners are to become fully - fledged members of a particular community.

Another important point to make is that the size of this specialized vocabulary is not fully established. As Nation states, "we do not know a lot about technical vocabularies but they probably range in size from around 1,000 words to 5,000 words depending on the subject area". This means that ESP learners may face an extremely large learning task to fully develop their understanding and use of specialized vocabulary in their subject area at university or in a professional context.

According to Basturkmen (2006), there are two fundamental perspectives on language for specific purposes. One approach sets that English has a common core of words all learners should know. In this view, specialization begins once learners establish that common core. The other approach conceptualizes all language as being for specific purposes (Basturkmen 2006 ) which means specialization should begin early. The key point here is where specialization should begin for language learners.

There are some methods for identifying vocabulary for specific purposes according to Read's (2007) study which have varied greatly and have lacked systematicity. Nation (2008) points out that very few statistical studies have been carried out in technical vocabulary.

One approach to identify specialized vocabulary is to consult experts in a particular field to help identify technical vocabulary (Schmitt 2010). Schmitt lists various difficulties with this method, including the fact that it is likely several experts on the same topic might well produce quite different lists, depending on variables such as their level of knowledge of the subject, the systematicity of their approach to developing the list, and how difficult it is to identify the technical words. Schmitt suggests that technical dictionaries may well have been developed using this method.

Technical dictionaries have been employed to help identify specialized vocabulary.

Chung and Nation (2004) outlined their experiences of using technical dictionaries to help decide whether a word is technical in nature. The authors note that while this technique may seem relatively straightforward, it demands a great deal of decision - making. These decisions include the size of the dictionary, whether just the single form of a word is to be taken into consideration or word family members, and the position of the word in main or sub-entries in the

dictionary that is considered to be the best technique with 80 percent accuracy in identifying technical vocabulary.

Using a scale is also essential in categorization of words. Chung and Nation (2003) devised a four - step scale to categorise technical vocabulary in an applied linguistics and an anatomy textbook. Step 1 on the scale represents words with meanings that have no specific connection to a subject area, for example *between*, *amounts*, and *early* . Step 2 contains words which are minimally related to the subject area, for example *supports*, *part*, and *protects* in anatomy. Step 3 is for words that are more closely related to the subject area, such as *neck*, *heart*, and *breathing* in anatomy. Step 4 is for words that relate closely to the technical subject area. These words would not be known generally, for example *fascia* and *pedicle* (2003).

Using this scale, Chung and Nation (2003) found that one in every three words in the anatomy text was technical, compared to one word in five in the applied linguistics text. The former one is important for several reasons. Firstly, this new definition of technical vocabulary is vastly different from earlier estimates. Previously, estimates believed this figure to be close to 5 percent (Coxhead 1998; Nation 2001 ) which is much lower than the 33 percent finding in Chung and Nation (2003) . Also, the variation in technical vocabulary between the two subject areas suggests that professionals in anatomy face a higher vocabulary learning challenge than those in applied linguistics. It could be the case that the applied linguistics text was more accessible for its readership than the anatomy text. Developing new scales means new ways of classifying technical words, so different results from different studies have to be accompanied by a clear understanding of how principles of selection and classification have taken place, just as Chung and Nation (2003) do in their study.

In identifying specialized vocabulary corpus-based studies are important as well. A corpus is a body of texts of written or spoken language. Corpus studies have contributed a great deal to our quest to identify and understand more about specialized vocabulary. They have been particularly useful for developing word lists for use in language classrooms and for independent study. Corpus - based studies allow for larger - scale investigations of words in context. They should be relatively easy to replicate. An example of a corpus - linguistic approach as a way to classify specialized vocabulary comes from Crawford (2007).

This corpus - based approach yields a very different view of specialized vocabulary than the Chung and Nation (2003) scale. Whereas Crawford focuses on the relationship between the function of the lexical items in her corpus to business studies, Chung and Nation (2003) focus on the closeness of the relationship between the words and the subject area.

One difficulty with identifying vocabulary for ESP is what to do with everyday words that take on a particular meaning in a specialized context. Sutarsyah, Nation, and Kennedy's (1994) study found 34 words (such as *cost*, *supply*, and *average*) that were clearly connected to economics.

These words appeared once out of every ten words on average. Furthermore, around twenty of these words are also in the first 1,000 words of the GSL (West 1953). The researchers compared the frequency of these words in the economics text and in a general academic corpus and found the words occurred more frequently in the specialized text.

Bringing special vocabulary is the most important situation. The purpose and methods of any corpus study need to be clear to teachers before they bring research findings into the classroom (Harding 2007). Byrd and Coxhead (2010) list some questions teachers and learners might use to find out more about a list of specialized words.

Nation (2001) outlines the kinds of knowledge learners need for understanding and using words. This kind of knowledge is important for everyday language and specialized words. A challenge for teachers and learners is ensuring that these kinds of learning are given attention as well as time and opportunity to develop. One way to approach this teaching and learning problem is to apply Nation's four strands (2007) to create a balanced vocabulary program. Nation's four strands are meaning - focused input (learning through reading and listening), meaning - focused output (where learning is through writing and speaking), language - focused learning (comprised of deliberate study of aspects of words such as how they are pronounced and spelled for example), and fluency development.

Another difficulty is that teachers tend to lack information on the use of target words and bundles (Byrd and Coxhead 2010). A good example of the kind of detail teachers need comes from Simpson - Vlach and Ellis (2010), who provide a rich description of the pragmatic functions they ascribe to various academic formulas that lead the way in allowing teachers and learners to search online for examples of key words, lexical bundles, and formulas in use.

As ESP is fast-moving field, consideration the nature of specialized vocabulary should be paid a great deal of attention by researchers and learners. Taking into consideration various meanings of the same words in different types of ESP, vocabulary should be contextualized having the basement awareness of a specialty. That's why in order to learn ESP a learner should have an appropriate knowledge level in both fields.

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