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# EDU WORLD 2018 <br> The $\mathbf{8}^{\text {th }}$ International Conference <br> THE ROLE OF VOCABULARY IN ESP TEACHING 

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#### Abstract

Vocabulary plays a major role in any language acquisition. Language acquisition is commonly seen as an endless process. Students, consciously or unconsciously, acquire new words permanently. The teaching of vocabulary in ESP should not be distinct from the teaching of vocabulary in EGP. ESP teachers should start by introducing words that belong to general language, but which are also frequently used in technical language. The introduction of vocabulary that has specialized meanings in certain disciplines comes second. In the past, vocabulary learning used to be restricted to learning lists of specialized words by heart and to reading and translating technical texts. Nowadays, students have access to more modern methods of learning, which help them develop their language skills. When discussing the teaching of ESP, one of the first questions that arise is whether the ESP teacher should be responsible for the teaching of technical vocabulary. It is generally agreed that the ESP teacher should not be responsible for the teaching of technical vocabulary. Yet, there are certain situations when the ESP teachers must ensure that the students are familiar with the technical words occurring in an exercise or in a text. It is essential that ESP teachers should be aware of their students' exact needs so that they should be able to select the vocabulary they teach in accordance with these needs. The better teachers know their classes, the easier it will be for them to choose the most appropriate techniques for each learner.


## 1. Introduction

It is well-known that English has become the international language of business and communication, which shows how important it is for those whose objective is to get a good command of this language to improve all their language skills. ESP is an approach to language teaching aimed at meeting the needs of particular learners. The main aim of an ESP teacher is to design appropriate courses for various learners whose target is to be able to use English in communicating with foreign partners in the professional field as well as in real-life situations.

## 2. Problem Statement

The acquisition of vocabulary represents one of the most important aspects of language teaching/learning. It is often said that without grammar there is little chance that communication will be possible, but without vocabulary there is no chance that it will be possible. It is a challenging process for any language learner as the lexis of any new language is so complex and varied that it may create a barrier to learning how to use it naturally and correctly.

ESP students need to understand and use technical vocabulary in their work. Those who manage to broaden their vocabulary will find no difficulty in accomplishing their tasks. They are motivated to use a second language effectively in order to meet society demands such as performing their job adequately, providing quality service and coping with new trends and requirements.

## 3. Research Questions

The importance of the teaching of vocabulary in ESP is nowadays widely accepted. In discussing the teaching of ESP vocabulary several questions arise. Should the ESP teacher resort to different strategies and techniques when introducing ESP vocabulary or should he/she use exactly the same ones he/she would use when teaching general vocabulary? Is the teaching of technical vocabulary the responsibility of the ESP teacher? How much vocabulary should an ESP student know in order to consider himself/herself a good user of the language?

## 4. Purpose of the Study

The present paper aims to introduce different types and categorizations of vocabulary in order to raise awareness of the role of vocabulary in ESP teaching/learning. It also aims to highlight the vocabulary that should be taught and the methods and the strategies that the teacher can resort to during the teaching process. The purpose of the paper is to discuss some problems of teaching specialized technical English terminology to students at a university level.

## 5. Research Methods

Second year students studying to become mechanical engineers were the main object of the study and the methods used were literature review and a close analysis of the challenges faced both by students and teachers during the process of ESP vocabulary learning/teaching. The classes surveyed are homogenous, three quarters of the students being at a pre-intermediate level, the other quarter being at an intermediate level. A close analysis of the students' preferences as far as teaching methods and techniques
are concerned reveals a striking difference between students in the 19-22 age bracket and older students. The former prefer fun classes, finding crosswords, puzzles and word searches very instructive. The latter prefer more rigorous activities. Judging by the students' involvement in the ESP class, a distinction can be drawn between students who find lessons dull and too serious and students who, being fascinated with the field they have chosen to study, enjoy lessons and find them captivating.

## 6. Findings

During the last decade or so it has been commonly accepted that vocabulary plays a vital role in language teaching/learning. Richards and Renandya (2002), state that "vocabulary is a core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write" (p. 255). Lewis emphasized the importance of vocabulary teaching/learning, saying that "lexis is the core or heart of language" (Lewis, 1993, p. 89). Dellar and Hocking state "If you spend most of your time studying grammar, your English will not improve very much. You will see most improvement if you learn more words and expressions" (cited in Thornbury, 2007, p. 13). ESP researchers and practitioners are equally aware of the importance of vocabulary. The choice of vocabulary must be made in accordance with the learners' needs as well as with the time available.

### 6.1. What vocabulary should the ESP teacher teach?

In terms of teaching vocabulary in ESP classes, a distinction is to be drawn between the following types of vocabulary:

### 6.1.1. Core and non-core vocabulary

Core vocabulary refers to those words that occur most often in a wide variety of situations. In a series of words such as beautiful, brilliant, gorgeous, superb, wonderful, beautiful can be easily seen as belonging to core vocabulary. According to Widdowson (1983), core vocabulary "has a long history. In the extensive work carried out on word counts, it was found out that certain lexical items of high aggregate frequency also occurred across a wide range of texts [...] 'common core' items are not schematically bound, and in consequence are subject to a wide range of interpretation" (p. 92).

Non-core words have specific rather than generic properties. Thus, screwdriver may be easily seen as belonging to non-core vocabulary whereas the generic term tool may be seen as core vocabulary. They are less likely than core words to have antonyms. For instance, stupid is the antonym of smart, but what is the antonym of brilliant? Non-core words occur in a reduced number of collocations. If we compare insane with mad, we can see that the former does not occur in as many collocations as mad (insane to do something; insane jealousy; mad with grief; mad with jealousy; drive somebody mad; be stark raving mad).

### 6.1.2. Spoken and written vocabulary

Written language is usually more complex than spoken language. Sentences are longer and sometimes more intricate in written English than they are in spoken English. A comparison between spoken and written vocabulary leads us to believe that "spoken language is the main source of exposure to language
for communication but written language will always remain a fundamental source of input for language learning" (Schmitt \& McCarthy, 1997, p. 38).

### 6.1.3. Technical and semi-technical vocabulary

Technical vocabulary is used either exclusively in a specialist field or much more frequently in a specialist field than in other specialist fields. In other words, each subject has words which are either used exclusively in that subject area or common words which acquire new meanings when they are used in that subject area. Thus, annealing and quenching are two technical words used in the field of mechanical engineering. Annealing is the technique of making (metal, glass etc) hard by allowing slowly to cool after heating until soft. Quenching is the technique of making metal or glass hard by dipping it in water or oil to cool it rapidly.

There is a general tendency to believe that the acquisition of technical language is more difficult and challenging than the acquisition of semi-technical language. Purely technical words are generally introduced and explained to the students by the subject teacher; hence, students are already familiar with them when they come across them during the ESP class.

Semi-technical words are those words which belong to general English but also occur in a technical context. Trimble (1985) defines semi-technical or sub-technical vocabulary as referring to those words which have one or more meanings in general English and which in technical contexts take on extended meanings (p. 129). Baker states that semi-technical vocabulary refers to "a whole range of items which are neither highly technical and specific to a certain field of knowledge nor obviously general in the sense of being everyday words which are not used in a distinctive way in specialized texts" (Baker, 1988, p. 91). For instance, adhesion, when used in general English, is the state or action of sticking together or to something. When used in technical English, it refers to the joining together of parts inside the body which should be separate. In technical English, it is also used as a countable word, referring to an area of tissue (fleshlike body substance) that has grown round a diseased or damaged part.

As it has already been pointed out, it is often claimed that the introduction of the technical vocabulary to ESP students should not be the ESP teacher's responsibility. It is commonly agreed that it is the subject teachers who should explain the technical words to students and also teach them how to use them correctly. As Strevens (1972) shows, "learners who know the specific field may have little difficulty with technical words; but a teacher who doesn't may have a great deal" (p. 223).

The following text illustrates the difference between semi-technical and technical vocabulary.
Forging also increases the hardness of metal. This is called work hardening. Metal becomes work hardened because its structure is changed by compression. The same result can be achieved without hammering or rolling - and therefore without changing the component's shape - by shot-peening. This involves firing small metal balls (metal shot) at the surface of components (when cold), at high speed. After components have been shot-peened, their surface is significantly harder. (Ibbotson, 2009, p. 46)

Forging, work hardening, work hardened, metal, compression, hammering, rolling, shot-peening, shot-peened are words which belong to technical vocabulary whereas structure and component belong to semi-technical vocabulary.

The text given above may seem quite complicated due to the abundance of technical words. They all refer to methods of forming, working and heat treating metal. Students studying to become mechanical engineers are already familiar with these techniques, which makes the text much more accessible to them.

Yet, there are situations when it is impossible for students to understand technical words and to use them in sentences of their own. When dealing with texts which contain a lot of new words, it is the teacher's task to select the ones students might find worth learning, to teach students how to pronounce them correctly and to explain them as clearly as possible to the students if they do not have any equivalents in the learners' L1.

### 6.2. What is meant by knowing a word?

The concept of a word can be defined in different ways, but a word is properly taught only if close attention is paid to the following three aspects: form, meaning, and use. The form of a word refers to its spelling, pronunciation and the parts that make it up (prefix, root, suffix). Meaning refers to what you are intended to understand by something spoken or written. Use refers to the grammatical functions of a word and the collocations that go with it. The more students know about a word, the more likely they are to be able to use it correctly in a variety of contexts.

As Thornbury (2007) shows, "learning is remembering. Unlike the learning of grammar, which is essentially a rule-based system, vocabulary knowledge is largely a question of accumulating individual items" (p. 23). According to Morgan and Rinvolucri (2004) "the acquisition of vocabulary is a branching process rather than a linear one" (p. 7). One of the greatest challenges students face is that of turning passive vocabulary into active vocabulary. If words are not used, they will be lost. Interesting topics and stimulating activities help students learn the new words in a natural way. The new words should be learned by means of associations. Thus, they should be sorted by categories (materials : hard and soft wood), by word families (adhere, adhesive, adhesion), by topic (types of steel), or by synonyms/antonyms.

Not only the new words occurring in a technical text may pose a lot of problems to students. There are situations when students may be tricked by words they are familiar with. They take them for granted, being really confused by the totally different meanings words can acquire in technical contexts. Thus, the sub-technical words bucket, grab, key have different meanings in different disciplines.

### 6.3. How much vocabulary should be taught?

Another question that arises when discussing the issue of teaching ESP is how much vocabulary should be taught during the ESP course. The truth is that the technical vocabulary of any language is so vast and complex that no course whatsoever will be able to cover it.

There is not an ideal number of new words to teach per lesson. The volume of words an ESP teacher decides to teach his/her students during a lesson is closely connected with a number of factors which greatly influence vocabulary acquisition.

The number of words to be taught is inversely proportional to the depth of knowledge teachers want their students to acquire. In other words, the more things students should know about a new word (meaning, spelling, pronunciation, connotations, collocations), the more time should be allotted to its teaching, which restricts the number of words to be taught during a lesson.

Teaching words for mere recognition is much easier and much less time-consuming than teaching them for production. When dealing with technical texts, students often have no difficulty in understanding them, partly thanks to the similarities between the Romanian technical terminology and the English one and partly thanks to their already being familiar with the technical content of the material.

The mere fact that a word was taught does not mean that it was learnt. It may take days and even weeks before students are able to use it in contexts and not in isolation.

Another factor to take into account when deciding how many words to teach during a lesson is their learnability. Long words are usually harder to learn than short words. Abstract words are less likely to be remembered than concrete words.

Students' ability to keep up with their teacher's pace of introducing new words is a very important factor that should be taken into consideration. Asking them to learn, let's say, about 25 words per lesson may become a burden for the slow learners, but also a real challenge for the quick ones because they will be able to find the right strategies to acquire the new vocabulary.

All the above-mentioned factors are very important when one decides how many words to teach per lesson. It is equally important that each and every teacher should make sure that all the newly-acquired words are receptively and productively automatized.

### 6.4. How should the new vocabulary be introduced to ESP students?

Enriching vocabulary leads to developing overall language skills. Having a rich vocabulary at their disposal, students are able to express themselves freely and to get involved in communicative activities. Moreover, they are able to understand the conversations they hear much better. In other words, vocabulary is not a target in itself. A rich vocabulary makes the skills of reading, listening and speaking much easier to perform. This is the reason why vocabulary should by no means be seen in contrast with the other language skills, but as a solid foundation upon which to build the overall language proficiency. New words can be acquired through conscious study, but more often than not they are learned indirectly through listening and reading, using context to infer the meaning.

As Dudley-Evans and St John show (2007), "the teaching of vocabulary in ESP follows similar general principles to those in EGP" (p. 83). When selecting techniques and methods to introduce new words, it is essential for teachers to be familiar with their students, their proficiency as well as their needs. Material selection should also be done in accordance with the class size and the students' personalities.

The use of word meaning is generally seen as the most accessible method of learning a word. Words are grouped in series of words according to their meaning, which helps the retrieval of a word from memory. Teachers can also develop corpora of technical texts. Students are encouraged to learn words in context, not as individual words. Showing students how words function in large contexts offered by authentic texts rather than in isolated vocabulary drills leads to solid vocabulary learning. Such instruction is by no means limited to providing students with the mere definition of the word. It means getting students actively involved in using word meanings and creating all kinds of relationships among them.

Presenting new vocabulary by means of visual stimuli is an exciting activity if it is adapted to the students' age and needs. The teacher presents a few new words to the class, discussing the definition and usage of each of them. Students may be asked to create their own flashcards, explaining their words and showing how they are used. This activity is meant to create a lasting visual memory.

Teachers should encourage students to use monolingual dictionaries when they fail to infer the meaning of a new word from the context. Monolingual dictionaries usually contain more information about a word than bilingual dictionaries.

## 7. Conclusion

Although vocabulary teaching/learning was a neglected area in foreign language teaching for a number of years, its importance is nowadays widely accepted. It is described as a very complex process. If this process is successful, ESP students will have no difficulty in participating in social as well as in academic tasks. Vocabulary is an inseparable component of any teaching syllabus and it is to be taught not only in a well-organized way, but also on a regular basis. It is essential that ESP teachers should choose vocabulary to be taught in accordance with the students' needs and proficiency level. Both teachers and students should be aware of the fact that words cannot be learnt instantaneously, but through repeated exposures to them.

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