TEACHING TECHNICAL ENGLISH: DIFFICULTIES AND SOLUTIONS REVISITED

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Summary: Insufficient professional background of ESP teachers in engineering fields is often a major reason for reluctance in teaching experts. This paper looks at aspects to be particularly considered when structuring and organising an ESP syllabus. These involve lexical aspects of professional language, classroom activities and communication skills which facilitate teaching ESP to experts, on the one hand, and provide them access into the universal English of professionals, on the other. The paper revisits areas which continuously pose challenge to ESP teachers, especially those engaged in teaching technical and IT English, and tackles new approaches towards solutions to problems commonly encountered in teaching ESP.

Key words: teaching ESP issues, ESP lexis, classroom activities, communication skills.

NASTAVA ENGLESKOG JEZIKA ZA POSEBNE NAMENE: PROBLEMI I REŠENJA – NOVI ASPEKTI

Režime: Nedovoljno poznavanje naučne oblasti jezika struke često je glavni razlog tome što nastavnici stranog jezika nerado pristupaju nastavi engleskog jezika za posebne namene. U ovom radu razmatraju se aspekti na koje treba posebno obratiti pažnju prilikom organizovanja gradiva u okviru engleskog jezika kao jezika struke, tačnije engleskog jezika tehničko-tehnološkog i informatičkog polja. To se prvenstveno odnosi na leksičke aspekte gradiva u okviru jezika struke, nastavne aktivnosti i komunikacijske veštine koje nastava engleskog jezika za posebne namene treba da obuhvati kako bi se, s jedne strane, nastavniku olakšao pristup nastavi, a s druge stručnjacima, odnosno studentima tehničkog usmerenja omogućilo da se bliže upoznaju sa univerzalnom tehničkom terminologijom na stranom jeziku. Rad obuhvata aspekte koji predstavljaju stalni izazov za nastavnike jezika struke, kao i načine za prevazilaženje teškoća sa kojima se oni susreću.

Ključne reči: problemi u podučavanju engleskog jezika kao jezika struke, leksika, nastavne aktivnosti, komunikacijske veštine.

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1. INTRODUCTION

Insufficient extra-linguistic knowledge relevant to the ESP learning process is often major reason for teachers to be reluctant to teach experts in professional fields. How does a teacher feel in the room with the least professional knowledge and experience? Can a teacher possibly help students express ideas they do not understand?

It goes without saying that English for Specific Purposes differs from General English in specificities determined by the profession or branch of science. But an ESP teacher should not overlook the fact that any branch of language, ESP included, stems from General English – ‘it has inherited the patterns of word formation, and syntactic and discourse organisation’. (Choroleeva, 2012) All problems arising from the questions regarding what to teach and how to teach it apply both to teaching General English and teaching Special English. The difference is probably in the degree of problematicity. With ESP, these two questions are further complicated. Choosing content vital for the purposes of learning becomes more difficult to make, partly because language teachers usually do not possess inside knowledge of the profession.

2. SPECIAL LEXIS: IS THE FEAR OF TEACHING ESP JUSTIFIED?

Consider the following technical sentence: *Wet-sintered capacitors, or 'wet-slug' tantalum capacitors are used only where high-voltage constructions are required.* The very context may appear intimidating. A teacher is frightened at first, but is the above sentence typical of the language that ESP students generally use? The answer is no, as it refers to the specific field within electrical engineering, not a general engineering area which most engineers or engineering students are familiar with. A good ESP teacher knows that in teaching ESP they should go no further than touching only surface, professional English which both the teacher and students are familiar with. Also, ‘the texts must not be too difficult, because neither the ESP teacher, nor the students have such a high a level of professional knowledge, but should contain some challenges which can activate the professional knowledge of the students’. (Helsvig, 2010)

An ESP teacher should not spend too much of his teaching time focusing on special lexis, as it is only a part of a whole picture which only serves to provide a frame for the work a teacher is expert at. ‘Think of ESP as a pyramid. Special lexis is the small pointy part at the top. The wide foundation of the pyramid is the English that everyone uses every day – the grammatical building blocks of sentence structure, verb tenses, adverbs, etc. Special lexis is important, but is useful only with the support and structure of English sentences to put it into.’ (Lansford, 2012) It is all about balancing between what you know and what you do not know, and particularly bringing into focus of what you do know within the context you are not quite familiar with. Recognising the construction of discourse and teaching students to deconstruct the ESP language are the major objectives of ESP teaching. Therefore, the job of an ESP teacher is to understand, analyse and reprocess meaning and pass the skill over to students. When it comes to systematically presenting subject-specific terms, an ESP teacher remains on the margins, as that is the job of subject-specific experts. If a teacher has not mastered a particular technical concept or a process, they can still play on their own strengths and demonstrate their English language expertise.

An unfamiliar and ultimately incomprehensible text can be used as a base for the explanation of broader, general English lexical or grammar segments. When designing the syllabus, the teacher should avoid engaging in complex linguistic frames that they will not be able to cope with and move the focus away from elements that can drive them to
frustrating situations. For example, given the insufficient scientific knowledge, an experienced IT ESP teacher will certainly avoid using the following text to illustrate the Passive Voice to students: *Storing differences between the frames gives the massive reduction in the amount of information needed to reproduce the sequence. Only a few P-frames are allowed before a new I-frame is introduced into the sequence as a new reference point...* They will preferably choose a more general frame, i.e.: *Viruses normally attach to command files (COM files) or to programs that have an EXE extension. They are loaded into memory when a program it has been attached to is run or executed. It stays in the memory until the computer is switched off.*

3. **CLASSROOM ACTIVITIES: IS TEACHING ESP NECESSARILY DRY AND DULL?**

Very often, particularly in cases of teaching English for engineers or technicians, ESP is expected to be hard and serious due to the ‘seriousness’ of the very subject matter. It is likely that teaching ESP in an artistic group will thematically provide a light and easy framework which is often established as a part of a wider cultural context. Here, general English covers a wide scope of English for Specific Purposes. In contrast, technical English lessons are disadvantageous in this respect, but can also be organised in a spontaneous and casual atmosphere. Except for safety-critical systems, such as breaks in cars or control systems for airplanes where mistakes can put lives at risk, technical ESP lesson can also be made fun. In problem solving units, a teacher can introduce a wide scope of interesting problems represented within problem solving sections. For example: *In the movie Tango and Cash, Kurt Russell and Sylvester Stallone escape from prison by jumping off the top of a tall wall through the air and onto a high-voltage power line. Before the jump, Stallone objects to the idea, telling Russell "We're going to fry." Russell responds with "You didn't take high school Physics did you. As long as you're only touching one wire and you're feet aren't touching the ground, you don't get electrocuted." Is this a correct statement?*

In addition, experienced ESP teachers report that regardless of the potentially heavy subject matter they face, engineers or technicians are at their best when classes are fun. Technical vocabulary can be taught and revised using crosswords, speed search, word searches and puzzles, and communication activities can take the form of games, e.g. students can analyse the function and purpose of a piece of equipment by imagining what life would be like without it. The implementation of such methods can help loosen the tension and provide a fresh start for more ‘tough’ teaching segments. In the same line, although a teacher generally relies on general English spiced with special one, he or she is sometimes unexpectedly confronted with a difficult material – even in such situations a teacher can turn the disadvantage to an advantage allowing the students to teach them. Surprisingly enough, students are always highly open to that form of communication exchange – they enjoy assuming the role of teacher. This makes them feel useful, which is often encouraging for the continuation of the course, but more importantly, this sort of skill will serve them well in the future workplace. Experienced ESP teachers report that this form of communication exchange also helps lighten the atmosphere in the class.
4. COMMUNICATION IS ALL: WHAT LIES AT THE HEART OF TEACHING ESP?

Maybe the most significant part of the teacher – student relationship, which is particularly emphasised in technical engineering, and information and technological disciplines, the one which ensures gaining ESP knowledge, is providing the platform for the authentic specialist discourse in the class. Well-planned and well-executed lessons involve extensive communication through conversation, extended texts and negotiations. Like grammar, this is another familiar territory to the teacher: asking for information, clarifying, interrupting and making suggestions, providing descriptions, and all other familiar activities. Some specific situations differ across fields. The focus of ESP learning in different research and scientific fields is not on the knowledge of a particular subject, but on core skills that can cover any discipline. All ESP students have some issues in common – for all of them it is of utmost importance to acquire particular skills, viz. describing functions and processes, explaining how devices or systems operate, specifying and describing properties of a particular system, discussing various issues, explaining methods and techniques, presenting results, diagnosing problems and providing solutions, etc. An ESP teacher’s job in this case is multiple – they need to develop the best understanding possible of their learners’ target context, create lessons that give students the opportunity to hear and use authentic language in the specialist context, and lead them to proficiency in the said skills.

ESP lessons need not necessarily be dry, serious and dull, either for an ESP teacher or an ESP student. The student has chosen the subject area, hence cannot consider it dry and dull. As for an ESP teacher, they only need to focus on subject matter they are expert at, and which is presented in a slightly modified but still flexible context to meet the teacher’s needs. Extensive communication made up of special lexis and grammar, spiced with little humor should be at the heart of ESP teaching.

ESP teachers often start ESP job with intimidating feelings, but those who stay with it find that their own expertise yields good results. Feeling safe on unsafe ground means success for an ESP teacher, as this may be the hardest lesson for an ESP teacher to learn.

5. CONCLUSION

Although the majority of ESP teachers teaching engineering, technical and IT students or professionals have no in-branch knowledge, they can still organise teaching in such a way as to ensure a leisurely but still serious teaching framework. Given the fact that ESP stems from general English, an ESP teacher can take advantage of universal aspects of the latter to its best. They will include some challenging tools which activate the professional knowledge of experts or students acquiring English of respective scientific disciplines. Knowing that recognising the construction of discourse and teaching students to deconstruct the ESP language are the major objectives of ESP teaching, an ESP teacher will avoid engaging in complex and frustrating linguistic frames and drive the teaching process towards teaching students or experts to acquire particular skills which essentially cover practical aspects from the professional standpoint, i.e. describing functions and processes, explaining how systems operate, explaining methods and techniques.

Experienced ESP teachers know that extensive communication that involves special lexis and grammar, spiced with little humour should be at the heart of ESP teaching.
6. REFERENCES


