

***TEACHING ESP TO ENGINEERS:
SELECTING CROSS-DISCIPLINARY MATERIALS***

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Modern engineers in their everyday life tend to use a lot of materials that are created in English or translated from other less popular languages into English. Moreover, engineers are required to present the results of their work at the international level, participate in meetings and workshops, be mobile and intensify their professional development. This, by-turn, requires a substantial language performance and good knowledge of speciality. This kind of integration is achieved by well-designed English for Specific Purposes (ESP) course that has various cross-disciplinary materials at its depository.

One of the main ideas of using cross-disciplinary materials in teaching ESP is to “expose” the learner to as much real language as possible. Even if the classroom is not a “real-life” situation, cross-disciplinary materials do have a very important place within it [1]. Let us consider advantages and disadvantages of using cross-disciplinary materials.

Advantages of cross-disciplinary materials include:

- “Real” language exposure with language change/variation being reflected;
- students learn about current trends in their specialism;
- ideal for language and profession integration into one subject (simultaneously) e.g. the same piece of material can be used for different tasks;
- contain a wide variety of text types, language styles not easily found in conventional teaching materials;
- encourage learning language for pleasure, likely to contain topics of interest;
- can save time at the curricular level (two or more disciplines can be compressed or integrated into one discipline).

Disadvantages of cross-disciplinary materials are:

- Often too professionally biased, difficult to understand at early stages of learning the specific subject;

- vocabulary might not be relevant to the student's immediate needs;
- can become outdated easily e.g. new research, products, articles;
- textbooks tend not to include incidental/improper English and become outdated very quickly;
- too many structures are mixed so lower levels have problems decoding the texts;
- special preparation for the teachers is necessary, can be time consuming.

It should be noted that current analysis of engineer's needs shows that on the one hand they are expected to work with such documents like product booklets, datasheets, manuals, various kinds of research papers, on the other hand to show good productive and receptive language skills within their specialty. That is why the selected cross-disciplinary materials focus on professional content, not specifically on the language content. Vocabulary and grammar is introduced in context through videos, (hyper) texts, or other authentic sources, while integrating listening, speaking, reading, and writing activities in appropriate ways [2]. So students can find relevant information on their specialism and recycle the vocabulary and key structures that are necessary for communication in specific professional situation. In this case the disciplines (ESP and certain Engineering discipline) are crossed.

In our opinion, the best way to organize such cross-disciplinary integration is to tie thematic units of the Engineering discipline to the ESP course, both in the meaning of content and time span. That will bring professional content into the language classroom; similarly will broaden the content of the specialism itself. The ESP course must be conducted with specific Engineering discipline simultaneously. Only in this case ESP teacher will be able to achieve proper mediation pattern. For example, students may watch video-lectures or read blogs of famous researches in their sphere, get additional information from the topic of interest, find answers to the problem questions whereas in the language lesson, students may present their own points of view on the topic, read the bios and discuss the ideas of outstanding people, present the results of their own research or experiments in the lab.

Cross-disciplinary materials help to create professional communicative situations that give future engineers the opportunity to transfer their acquired language and

professional skills to the real working environment. As the content is taken from their professional sphere, future engineers are immersed into the subject and the ESP course all the time that helps to create more autonomous learning environment and the provoke students' curiosity for future professional development.

References

1. Berrardo, S. (2006). The Use of Authentic Materials in the Teaching of Reading.
<http://www.readingmatrix.com/articles/berardo/article.pdf>
2. Bonohue-Bergeler, D. English with Science Niblets: Teachers' Guide.
http://www.science-niblets.org/English/Teachers_Guide.pdf