

TEACHING TECHNICAL VOCABULARY TO THE 1st YEAR STUDENTS OF FOOD PROCESSING

Roxana MIHALACHE ¹

¹ University of Agricultural Sciences and Veterinary Medicine of Iași

Abstract

In a changing world, the needs of those who learn English also evolve. In the last decades, the English courses for specific groups of learners have become highly important. English for special purposes found its way after the II World War. As for Romania, even if there was a certain interest in this field, it was taken to the next level only after 1990, when there appeared the economic and technological background for the development of this type of English.

The scientific paper presents methods used for teaching the technical vocabulary to the first year students of the faculty of agriculture, the specialization of Technology of Processing Agricultural Products. The technical texts that are studied during the first year are those related to different types of cereals, such as wheat, maize, oats, barley, rice and millet. There is also a unit that deals with the history of food processing and types of preserving foodstuffs. The vocabulary awareness has in view various types of exercises, such as: true or false exercises and answering questions synonyms and antonyms, matching words, word-building types of exercises, find the mistakes, translation of technical texts both from Romanian into English and from English into Romanian.

Typical mistakes have been found and we propose ways of correcting them.

We noticed that during the students' performance the most frequent mistakes were those of pronunciation. When learning the new vocabulary, the students confused words, trying to use the more common one; also they misspelled and misused words.

Key words: English for Specific Purposes, communicative competences, vocabulary awareness.

Our world is rapidly changing and so is English. After the Second World War, when different fields of activity developed, there has been an increasing need for learning English. At the same time, the language we speak be it English or Romanian, varies from one context to another. This naturally has led to the development of English courses for specific groups of learners.

Basically, it should be easy to identify the features of specific situations and then make these features the basic material of the course. But most difficulties, which happen to be the very important ones, appear when using different methods to teach technical vocabulary.

As suggested by its name, English for Specific Purposes covers the common nucleus, the basic structure and categories of Basic English and the variations relevant to the specific domain. Along the years, the guiding principle of English for Specific Purposes has become "Tell me what you need English for and I will tell you the English that you need".

MATERIAL AND METHOD

The basic materials for the research consisted in the written papers of the students, the

observations taken during the semester from the conversations and also the handouts used during the courses.

RESULTS AND DISCUSSIONS

Although manufacturing and production of different types of goods appeared since the 19th century, the breakthrough took place after the II World War. Together with them, English turned into a world wide used language.

The need for specialized English made methodologists turn their attention to this narrow domain: English for Specific Purposes.

Even if the study of ESP started together with the study of linguistics, in 1988, Strevens was the first to make the distinction between absolute and variable characteristics of ESP. For him, the ESP absolute characteristics were: designed to meet specified need of the learners, related in content to particular disciplines, centred on the language appropriate to those activities in syntax, lexis etc., and the analysis of this discourse, and in contrast with General English. In the variable characteristics, ESP was restricted to the language skills to be learned and was not taught to any pre-ordained methodology.

In 1997, Dudley-Evans offered a modified definition. His absolute characteristics included ESP defined to meet specific needs of the learner, centred on language skills appropriate to the activities and also the use of the underlying methodology and activities of the discipline it serves. As for the variable characteristics, Dudley-Evans noticed that it is generally designed for intermediate and advanced students.

There were other theoreticians of ESP, such as David Carter, who identified different types of ESP among which English for Academic and Occupational Purposes, the one that we are also dealing with.

As we can see, there has been much interest in English for Special Purposes along the decades, but in Romania only after 1990 there appeared the economic and technological background for the development of this type of English. As the demand for English to suit particular needs has increased, the university curricula have adjusted to the necessities.

The geographical area of Romania not only has an impact on the professional requirements but also affects the students' need of English when they enter the university. In the last few years, the study of English has become a trend; the children start studying it in kindergarten and become more acquainted to its rules along the years, especially in high school. The students of The University of Agricultural Sciences and Veterinary Medicine Iasi have upper-elementary to advanced knowledge of English.

When we start teaching English for different specializations in our university, such as agriculture, food processing, horticulture, landscape design, we take into account information about the students, their goals and objectives for determining which aspects of ESP learning will be included, emphasized, and used as basis of the course. One of the goals of teaching ESP is to meet the students' needs and expectations.

In this paper we focus on teaching English to the 1st year students of the specialization of *Technology of Processing Agricultural Products*.

As for the content of the course, there are many ways of conceptualizing it. We focus both on developing "basic skills", communicative competence, intercultural competence and on vocabulary awareness.

Basic Skills

Communicative competence

Even though the students have knowledge of English when entering the university, we continue to improve their communicative competence, as it is useful for them to be able to communicate in any

situation, be it connected to their field of activity or a general one. We use methods to improve this competence by conversations on different subjects, such as history of food processing, types of cereals and their use, history of bread making, types of bread, oleaginous plants and so on. At the beginning of the seminar we have a lead-in discussion which offers us the opportunity to see the problems the students face connected to both grammar and lexis. We generally do not interrupt the students during the conversation, letting them to freely express their opinions. The corrections are made at the end of the conversation, pointing out the most frequently encountered mistakes. Here, our goal is to increase the accuracy of the discourse, but also to offer the students confidence in their capacities when speaking English.

For example, when talking about cereals, the most often encountered mistake is the confusion of words *wheat* [^hwi:t] and *wet* [wet]. Being more familiar to the word *wet* which belong to the Basic English, the students try to make analogies and misspell it. For the same reason the students wrongly pronounce the words *to droop* [dru:p], which means *a se ofili* and *to drop* [drop], *a picura, a lăsa să cadă*.

Another common mistake is the word *legume*, the plural of *legumen*, which means *plante leguminoase*, often translated by students as *legume*. The easiest way of correcting this mistake is to start from the Romanian word, *legumă* and find the English version, *vegetable*. Thus, when we put the two words next to each other, the confusion no longer appears.

Intercultural competence

Many students have the opportunity to study abroad for three or four months within the Socrate Erasmus programmes. In order to take full advantage of the whole experience, they need to have solid knowledge both of Basic and Technical English. The former is useful for every day conversations with colleagues, teachers, at the library etc, while the latter is essential for studying the specialized materials, understanding the courses and taking notes.

For example, some of the Erasmus students go to study in Italy. There they have subjects such as olive oil processing. Even though in our country olives are not cultivated for massive production, we consider that the students should have minimum information in this field in order to be able to cope with certain situations and challenges.

That is why it is fundamental for the students to have an average knowledge of technical English.

Vocabulary awareness

As regards the technical vocabulary, here appear most of the problems. The technical vocabulary of food processing mainly comprises words that have a Germanic origin, making the assimilation process a more difficult one, as a lot of terms do not resemble the ones in Romanian.

Some methodologists consider that the primary task when dealing with a text is to teach word recognition in context, including contextual guessing, instead of list of unrelated words.

Even though, during the English seminars, we generally deal with specialised texts from food processing domain, we follow the already mentioned principles. Within the texts we offer images of cereals or types of breads and ask the students to identify the *rye*, *barley* or *wheat* from a list of images. But in order to reach this point, it is essential for the student to have an idea of the type of cereal we deal with. Thereby, only when absolutely necessary, we offer the Romanian version of the word.

Other types of words such as **vernalization**, **starch**, **bran**, **tassel**, **kiln**, are also important for the understanding of specialised texts. In order to have an efficient learning of these words, we use different types of exercises. Many of them will be mentioned below.

The first one is the **Reading comprehension** which comprises both *true or false exercises* and *answering questions* related to the text. Both the former and the latter exercises focus on the new specialized words and their integration in the context.

An example in point is the expression **joint of the stem**. First of all, when we finish reading the text we emphasize on the difference between **stem** [stem] and **steam** [sti:m], as 90% of the students misread these words. We reinforce the expression by exercises. *The true or false exercise* comprises a sentence like:

The secondary roots arise from the joints of the stems. (which is true) and there is also a question regarding this expression.

The students should be able to make the difference of certain types of cereals, such as **barley**. There are three types of this cereal: **six-row barley**, which means *orz comun*, **two-row barley** – *orzoaică* and **irregular barley** – *orz neregulat*. We have all the three items mentioned in the text:

*“Barley belongs to the genus **Hordeum**, of the family **Poaceae** (formerly **Gramineae**). **Two-row barley** is classified as **Hordeum distichum**, **six-row barley** as **Hordeum vulgare**, and **irregular barley** as **Hordeum irregulare**. [...]The different cultivated varieties of barley belong to three*

*distinct types: **two-row barley**, **six-row barley**, and **irregular barley**. The varieties grown in the United States are generally of the **six-row type**, in Europe the **two-row type** predominates, and the **irregular type** is found in Ethiopia. The finest malting varieties are the **six-row** and the **two-row types**”*(Mihalache R. pp. 53-54).

In the *True or False exercise* we highlight the terms to make the students more familiar with them:

“The varieties grown in the United States are generally of the two-row type, in Europe the six-row type predominates, and the irregular type is found in Ethiopia.” (which is false)

Other technical terms can be assimilated through their **synonyms** or **antonyms**. Very good examples are the words: *rancid*, *to seal*, *slaughter*, *to cure* (with its meaning of *to preserve*), *dormant*, *to ripen*, *livestock*, *kernel* and so on. During each seminar we have one exercise with synonyms and another with antonyms that comprise many new technical or semi-technical words.

Clearly, nouns such as **vernalization** and **starch** are difficult to assimilate by the first year students; we help them by introducing *“Match the words with the definitions below”* type of exercise. Referring to the word **vernalization**, the students did not even know what the word *iarovizare*, meant in Romanian. So, we had to give the explanation of the word (we did it in Romanian at the Vocabulary) and while doing the exercise we could have a feed-back showing if they understood the explanation and could use it correctly in English: *“the subjection of seeds or seedlings to low temperature in order to hasten plant development and flowering. It is commonly used for crop plants such as winter rye and is possible because the seeds and buds of many plants require cold in order to break dormancy”*.

One of the most difficult areas of vocabulary to be assimilated are those that gather words belonging both to Basic and Technical English, as students already knowing a term, will tend to translate it with its basic meaning. The most frequently terms we came across were:

a) **to cure** used not with the meaning of “to stop someone from being affected by an illness” (which is the first definition mentioned in the Macmillan Dictionary and which belongs to Basic English), but with that of “to preserve meat, fish or other foods by drying them, or by using smoke or salt” (Macmillan, p. 340), which is the fourth of four possible definitions of the words.

b) **grass** – the common meaning “a very common plant, with thin green leaves that covers the ground”(Macmillan, p. 620) is easily mistaken for the second more specialized definition, which

appears only in the *Oxford Dictionary*, “(Bot.) plant of family Gramineae, including also cereals, reeds, and bamboos” (Oxford Dictionary, p. 467)

c) **ear** – translated as “organ of hearing” instead of “the part at the top of a plant such as wheat that contains the grain” (Macmillan, p. 436)

d) **spike** – the definition belonging to Basic English, “sharp point, pointed piece of metal” is more often used, while the appropriate one is “flower cluster of many sessile flowers arranged closely on long common axis” (Oxford Dictionary, p. 1104)

There are other exercises to enrich the technical vocabulary, most of the time proving itself essential during a specialized conversation. When teaching we ask the students to do *word-building* type of exercises. Some of the terms are used in their technical context, but we also give examples from other areas in interest or from Basic English. Some examples in point are:

- **rancid** → **rancidity**: *Prevention of may become a problem in such baked goods as crackers, cookies, and fruit cake which may be stored for longer or shorter periods (RANCID).*
- **pasteurize** → **pasteurization**: *is the process of heating a liquid, particularly milk, to a temperature between 55° and 70° C, to destroy harmful bacteria without materially changing the composition or the nutritive value of the liquid (PASTEURIZE).*
- **germ** → **germination**: *The idea of setting up his own company began to in his mind. (GERM).*
- **gluten** → **glutinous**: *The major production areas for rice are the upper northern and north-eastern regions of Thailand where water is scarce. (GLUTEN).*
- **boil** → **parboil**: *Firstly, he and then sautéed the new potatoes. (BOIL).*
- **flower** → **inflorescence**: *The of rice is made up of spikelets bearing flowers that produce the fruit. (FLOWER) (Mihalache, R., 2010., pp.14, 76).*

At the end of the seminar we solve more difficult exercises, which need even more attention. Thus, students can have exercises which ask them to *find the mistakes* and also to *translate* texts, either from English into Romanian or vice versa.

From the experience gained along the years we came to the conclusion that these types of exercises are the most appropriate for the 1st year students at the specialization of Technology of Processing Agricultural Products for acquiring the necessary technological vocabulary. They can be adapted and improved through the course design; while generally playing a relatively minor part in the life of the General English teacher, for the English for Special Purposes teacher, course design is often a substantial and important part of the workload.

CONCLUSIONS

The interest in English for Specific Purposes has grown in Romania after 1990.

We analysed the mistakes made by the 1st year students in TPAP within UASVM Iasi while acquiring the new technical vocabulary.

The most frequent mistakes were those of word confusion.

In order to improve the students' accuracy of using technical English, we presented several learning strategies, types of exercises and remedial measures.

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