THE DEVELOPMENT OF THE PROFESSIONAL COMMUNICATION COMPETENCE IN ENGLIH TO STUDENTS FROM THE FACULTY OF BIOLOGY AND GEOSCIENCES

CZU: 811.111`243`276.6:[57 + 55] **https://doi.org/10.5281/zenodo.10650124**

Angela Tulei
Moldova State University
ORCID 0000-0003-2648-8027

The present article is dedicated to the need of teaching ESP, English being considered the Lingua Franca of our age, which means that it is the dominant language of this era. Being able to communicate scientifically is an important skill for students graduating with a science degree. Skills used in future careers for science majors include oral and written communication, as well as science literacy and being able to create figures to display information. In the article below, we present an active curriculum that can be easily incorporated into any content-focused undergraduate Biology course in English. The curriculum is designed around scientific literature that engages students in a multitude of active learning activities to develop different types of scientific communication skills.

Keywords: *Competence, communication skills, scientific communication, professional communication competence.*

ESP has become quite well known because English has acquired the status of an international Lingua Franca in almost any field of study. The term "specific" in ESP refers to the specific purpose for learning English. The present study is an attempt to find out the factors that make the ESP students' use of English language for academic/professional purposes. ESP has become increasingly important as there has been an increase in vocational training and learning throughout the world; with the spread of globalization has come the increasing use of English as the language of international communication; more and more people are using English in a growing number of occupational contexts.

Characteristics of ESP :

- ESP is designed to meet the specific needs of the learners;
- ESP makes use of the underlying methodology and activities of the field it serves;
- It is centered not only on the language (grammar, lexis, register), but also the skills, discourses and genres appropriate to those activities.

The ESP focal point is that English is not taught as a subject separated from the students' real world (or wishes); instead, it is integrated into a subject matter area important to the learners. ESP students are usually adults who already have some acquaintance with English and are learning the language in order to communicate a set of professional skills and to perform particular job-related functions. It concentrates more on language in context than on teaching grammar and language structures and covers subjects varying from accounting or computer science to tourism, business management and sciences.

ESP combines subject matter and English language teaching. Such a combination is highly motivating because students are able to apply what they learn in their English classes to their main field of study. Being able to use the vocabulary and structures that they learn in a meaningful context reinforces what is taught and increases their motivation. The students' abilities in their

subject-matter fields, in turn, improve their ability to acquire English. Subject-matter knowledge gives them the context they need to understand the English of the classroom.

In the ESP class, students are shown how the subject-matter content is expressed in English. ESP assesses needs and integrates motivation, subject matter and content for the teaching of relevant skills.

The analysis of specialized literature shows that over the years the notion of ***competence*** has been approached from different perspectives. For the first time the concept of *competence* was used by Plato. Initially, the given term appeared in the psychology of professionalism, then it spread to practical researches of social psychology, and further on turned to cognitive researches, namely the pedagogical study.

According to G. Boterf, *competence* designates a set of resources (knowledge, abilities, attitudes), in order to solve a complex situation belonging to the situational-problematic field. (1999 : 38) Analyzing the views of researchers such as J. Henry, J. Cormier, we deduced the following basic characteristics of the competence: it is complex, relative, potential; it is exercised in a certain situation; it is complete and inextricable; it is transferable; it is conscious, etc.

Similar views belong to authors like Aristotel, G. Boterf, N. Chomsky, J. Raven, L. D'Hainaut, B. Rey, X. Roegiers, M. Minder, who described the term and notion of *competence* as a set of ideas where the *competence* is an ability based on knowledge, skills and attitudes acquired through learning. (Minder, 2003)

R. Gherghinescu, C. Cucoș, Vlad Pâslaru, consider that *competence* represents knowledge, skills and attitudes. (Pamfil, 2003 : 58)

The ***communication competence*** is seen as a component of the language competence.

The concept of *communication competence* was used for the first time by D. Hymes (1972, *Apud :* Gîncu, 2014 : 19-24), which he attributes to the level of learning a language; this allows transmitting statements and understanding messages in specific contextual situations.

T. Slama-Cazacu defines *the communicative competence* as "an ability to present one's own intentions, needs, interests in the communication process, as well as to perceive the interlocutor, in order to initiate a dialogue in the educational process. In education, the ability of communication determines the understanding between the teacher and the student in order to achieve the goals and carry out the learning activity." (1999 : 32)

A fundamental distinction in the definition of *competence* is made by Vl. Pâslaru, who scores as one of its main characteristics the fact that it represents an acquisition of the student personality, also demonstrated by the verbs *to know how to do, to be able to, to be capable of doing, ...,* etc. (2014 : 216)

By ***professional competence*** is meant the proven ability to select, combine and appropriately use knowledge, skills and other acquisitions (values and attitudes), in order to successfully solve a certain category of work or learning situations, circumscribed by the given profession, under conditions of effectiveness and efficiency. *Professional competences* represent an integrated and dynamic body of knowledge (knowledge, understanding and use of specific language, explanation and interpretation) and skills (application, transfer and problem solving, critical reflection, creativity and innovation). (Lupu, Cabac, Gîncu, 2013 : 12)

The professional communication competence involves the competence to communicate in a specific language and includes knowledge in the field in addition to the components of the communication competence. *The professional communication competence* entails knowledge, skills and abilities with reference to the specialized language.

The following *characteristics* of the *professional communication competence* can be identified:

- to communicate in specialized language;
- to put the knowledge into practice through a professional treatment of the field;
- to present special qualities and characteristics based on a learned subject;
- to reproduce and explain by appropriate means the content of communication, sources, notes, indications etc.;
- to develop learning skills for the future.

In our opinion, being a competent professional means:

- to master basic knowledge in the specialized language;
- to possess specialized knowledge in the specialized language;
- to put the specialized knowledge accumulated during the studies into practice;
- to use the skills characteristic to the profession, acquired during internships;
- to communicate, inform, make decisions in problem situations;
- to propose and offer solutions to problem situations, etc.

The ultimate objective of learning a foreign language is the user's professional communication competence, possessing the structure and grammar of the mother tongue, intercultural awareness, practical skills and abilities, heuristic skills, possession of other skills: lexical, grammatical, semantic, discursive, functional, etc.

Below, we will identify some of the responsibilities of both teachers and students.

The responsibility of the teachers: As ESP teachers, we must play many roles. We may be asked to organize courses, set learning objectives, establish a positive learning environment in the classroom, evaluate students' progress, etc. One of our main tasks will be selecting, designing and organizing course materials, supporting the students in their efforts, and providing them with feedback on their progress. The teacher should create an atmosphere in the language classroom which supports the students. Learners must be self-confident in order to communicate and we have the responsibility to help build the learner's confidence. The teacher is a resource that helps students identify their language learning problems and find solutions to them, find out the skills they need to focus on.

The responsibility of the students: The learners come to the ESP class with a specific interest for learning. People learn languages when they have opportunities to understand and work with language in a context that they comprehend and find interesting. In this respect, ESP is a powerful means for such opportunities. Students will acquire English as they work with materials which they find interesting and relevant and which they can use in their professional work or studies. Learners in the ESP classes are generally aware of the purposes for which they will need to use English. They are constantly expanding vocabulary, becoming more fluent in their fields. Traditionally ESP courses are designed for intermediate or advanced adult learners. Some teachers are afraid of making the transition from teaching general English to teaching ESP. There is also a danger that the novice ESP teachers will only use materials that they feel comfortable with and will not stretch their learners.

An ESP program is built on an assessment of purposes and needs and the functions for which English is required. We have been teaching English to students from the Faculty of Biology and Geosciences for many years and we decided to put all the information we've been using during all these years together into one document and to update it every year. The book *Biology for Students from the Faculty of Biology and Geoscience* represents a compilation of texts and assignments on various biology topics and is meant for the first-year students of

intermediate proficiency level. It is organized into generic chapters on areas such as *Biology, Botany and Zoology, Anatomy and Physiology, The Nervous System, Medicine and Health, Nutrition, Evolution and Genetics, Ecology and Environment* which have been divided into subchapters to facilitate students' comprehension. The structure of the eight chapters included is similar and the assignments are grouped according to the 3 levels: knowledge, application and integration. Each chapter is provided with italicized key terms and a transcription in the notes to the text section is given. In order to avoid any translation misinterpretation of the key terms, we decided to include Romanian and Russian translation at the end of the text, as well as translation exercises in two languages, the Romanian and the Russian ones and a set of grammar and vocabulary exercises. Each chapter starts with speaking activities and ends up with a couple of writing tasks. Students have to comment on proverbs, quotes, situations, write dialogues, essays, make presentations on proposed topics, create term glossaries, reports, etc. (Silnic, Tulei, 2010: 12)

A sample topic is *The Cell*. Students study a scientific text on the structure of the cell, learn key terms such as *cell, membrane, nucleus, cytoplasm, protoplasm, deoxyribonucleic acid, mitochondrion, organelle, appendage, genome, mitochondrion, etc.* The transcription and the translation of the terms both in Romanian and Russian are provided, students being asked to find the definition of the terms in English. Comprehension check starts with some questions on the text, a summary of the whole abstract being made. There is also a set of vocabulary exercises, such as *Match the words with the definitions* and *Find in the text words for the definitions*, the first letter of the term being provided. A good example which really works is the assignment with the idioms where students have to match them with the right definition, for example: *blood is thicker than water – family relationships are stronger and more important than other kinds of relationships, such as being friends*; and then fill in the gaps with these idioms. They also have to use the idioms in sentences of their own, and even in the writing activity they have to comment on, which in this very subchapter is on the following situation: *A spaceship carried some substance to the Earth from another planet. Examining it under the microscope you saw a cell. What conclusion can you draw from this fact?* Here students have to prove they know how to write correctly an essay, the right structure, and to prove they understood the text *The Cell*, giving arguments and details regarding the cell structure and commenting that *cell means life*. As a speaking activity, students are offered a list of quotes/statements by famous authors and are asked to speak on the topic in a certain amount of time, each student being involved and thus speaking being practiced. *(Ibidem* : 20)

One of the problems that face many ESP teachers is that students expect the teacher to be incredibly knowledgeable about everything, so it is a hard work for both the teacher and the students. In our work we sometimes ask for help our colleagues from the Faculty of Biology and Geosciences who are always eager to support and even teach us things which we are not sure about.

The analysis of specialized literature allowed us to state the following: skills reflect an ability to constitute a whole of knowledge, capacities and attitudes, willing to grant the individual the ability to achieve a goal, a role, to carry out a task, a business, an occupation as lasting components of the individual, in continuous development and evolution. Competence in the instructive-educational process becomes a component of the educated and belongs to a category with an elaborate educational capacity, has a triadic structure, is externalized in different levels of development, depending on age and orientation in a certain field.

Professional communication competence refers to both aspects of competence, as well as those of communication competence.

In conclusion it should be mentioned that ESP is an exciting movement in language education. It is opening up rich opportunities for English teachers and researchers in new professional domains. ESP is very important at least because it has become a rule that a well-educated and intelligent person has to speak English which is considered to be "the language of the future".

Bibliographic references :

BOTERF, Guy L. (1999), *L'ingénierie des compétences,* Paris : Editions d'organisation.

GÎNCU, Irina (2014), «Dimensiunea valorica a competenţei profesionale». In : *Didactica Pro,* nr.1 (83).

LUPU Ilie, CABAC, Valeriu, GÎNCU, Silviu (2013), *Formarea şi dezvoltarea competenței de programare orientată pe obiective la viitorii profesori de informatică: Situații de învățare. Standarte de performanță: Tehnologia programării orientată pe obiecte*. Univ. de Stat Tiraspol, Chișinău: UST.

MINDER, Michel (2003), *Didactica funcţională,* Chișinău : Cartier Educaţional.

PAMFIL, Alina (2003), *Limba şi literatura romană în gimnaziu –Structuri didactice deschise,* Pitești : Editura Paralela 45.

PÂSLARU, Vlad et alii (2014), *Competențe ale pedagogilor: Interpretări,* Chişinău : Continental Grup.

SILNIC Ina, TULEI Angela (2010), *Biology. Suport de curs la limba engleză pentru Facultatea de Biologie şi Pedologie*, Chişinău : CEP USM.

SLAMA-CAZACU, Tatiana (1999), *Psiholingvistica – ştiinţă a comunicării,* Bucureşti : All Educational.