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## DEVELOPING SOCIO-CULTURAL COMPETENCE OF FUTURE ENGINEERS IN THE TRAINING PROCESS OF ENGLISH FOR SPECIFIC PURPOSES

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Nowadays, Ukrainian economic society is experiencing a strong demand for competent engineering specialists with higher education, who are able to communicate in a foreign language (English). The developed sociocultural competences allow engineering graduates to ensure successful activity in the society. The article analyzes the elements of professional competence of a future engineer, reveals the concept of sociocultural competence and defines its components.

The authors of the paper identify ways and methods of developing sociocultural competence of future engineering graduates in the process of teaching English for Special Purposes, in particular when using modern means of information and communication technologies. It has been emphasized that authentic materials, selected and organized properly, are the most effective means of reflecting, understanding and mastering the specifics of the culture and speech behavior being studied. The authors' reasoning is based on the principle of communicative orientation of foreign language teaching. The authors underline that in the process of communication between representatives of cultures, the differences between these environments lead to certain difficulties in communication, which is explained by different processes of decoding the received messages, so they conclude that it is necessary to cultivate students' cultural sensitivity, develop the ability to correctly interpret specific manifestations of communicative behavior in different cultures and, therefore, improve practical skills and abilities. The authors conclude that it is effective to form the interrelation of professional and sociocultural competences for quality training of future engineers in English for Special Purposes. Only a comprehensive approach contributes to the organic integration of a future specialist into a new cultural environment, and, consequently, prepares him/her for effective functioning in the conditions of intercultural communication. In the future, the developed socio-cultural competence will contribute to personal growth, intellectual development, cultural tolerance, and the development of the professional career of future engineering specialists, as they will be able to carry out successfully professional activities with business partners in English.

**Keywords:** professional competence of an engineer; socio-cultural competence; information and communication technologies; English for Specific Purposes, communication approach to learning process.

**Бринцева О.В., Подорожна А.О.** "Формування соціокультурної компетентності майбутніх інженерів у процесі навчання англійської мови за професійним спрямуванням".

Сьогодні економічне суспільство України відчуває високу потребу в компетентних фахівцях із вищою інженерною освітою, здатних здійснювати комунікацію за допомогою іноземної мови. Сформовані соціокультурні компетенції дозволяють випускникам інженерних університетів забезпечити успішну діяльність у соціумі. У статті проведено аналіз елементів професійної компетентності майбутнього інженера, розкрито поняття соціально-культурної компетенції та визначено її компоненти.

Авторки роботи виокремлюють шляхи та методи розвитку соціокультурної компетентності майбутніх випускників інженерних закладів вищої освіти у процесі навчання англійської для спеціальних цілей, зокрема при використанні сучасних засобів інформаційно-комунікаційних технологій. Наголошується, що автентичні матеріали, відібрані та організовані належним чином, є найефективнішим засобом відображення, розуміння та засвоєння специфіки культури та мовленнєвої поведінки, що вивчається. В основу авторського міркування покладено принцип комунікативної

спрямованості викладання іноземної мови. Авторки підкреслюють, що в процесі комунікації між представниками різних культур відмінності між цими культурами призводять до певних труднощів у спілкуванні, що пояснюється різними процесами декодування отриманих повідомлень, тому вони приходять до висновків, що необхідно розвивати у студентів культурну чутливість, виробляти вміння правильно інтерпретувати конкретні прояви комунікативної поведінки в різних культурах і, отже, розвивати практичні навички та вміння. Таким чином задля якісного навчання майбутніх інженерів англійської для спеціальних цілей ефективно формувати взаємозв'язок професійної та соціокультурної компетенції. Лише комплексний підхід сприяє органічній інтеграції майбутнього фахівця в нове для нього культурне середовище, а отже, готує його до ефективного функціонування в умовах міжкультурної комунікації. У майбутньому сформована соціокультурна компетенція сприятиме особистісному зростанню, розвитку інтелекту, формуванню культурної толерантності, а також розвитку професійної кар'єри майбутніх фахівців інженерного профілю, оскільки вони зможуть успішно здійснювати професійну діяльність з діловими партнерами англійською мовою.

**Ключові слова:** професійна компетентність інженера; соціокультурна компетенція; інформаційно-комунікаційні технології; англійська для спеціальних цілей, комунікаційний підхід до навчання.

**Problem statement.** The main goal of higher professional education is to train a qualified employee of the appropriate level and profile, competitive in the labor market, competent, responsible, competent, skilled in his/her profession and oriented in related fields of activity, capable of effective work in his/her specialty at the level of world standards, ready for continuous professional growth, social and professional mobility; meeting the needs of the individual in obtaining appropriate education. Economic society of Ukraine has a high demand for initiative specialists who can adequately fulfill their functions, characterized by high responsiveness, socio-professional mobility, readiness to quickly update knowledge, expand the range of skills, master new activities, with well-developed communication skills. This implies the presence of competence. Higher professional education is called to create the necessary background and conditions for its development.

At the socio-pedagogical level, the relevance of the research is determined by the social order of the society for the training of competent engineers having socio-professional adaptability and mobility, communicability, capable of meaningful interaction with other people (not only with native foreign language speakers) and with the products of their activities (texts and other objects reflecting their values, views, traditions) through a foreign language. Developed sociocultural competences will enable engineering graduates to use effectively their opportunities for creative self-realization, social interaction and adaptation to changing conditions. Sociocultural competences ensure successful human activity in society and they can be applied both in social and professional environments [3].

**Literature review.** The analysis of scientific-pedagogical literature has revealed the contradiction in the system of training specialists with higher engineering education between the socio-professional need for the ability to navigate in various social and professional situations and adapt to changing conditions and the insufficient level of sociocultural competence development in engineering university graduates.

The discipline "English for Specific Purposes" plays a special role in the sociocultural competence development. Such elements of this competence as an ability to communicate, negotiate, skills and readiness to cooperate with other people, to consider other people's point of view, etc., are developed in the process of learning English.

The learning, teaching and use of English in higher education institutions of Ukraine is carried out in accordance with the "Conceptual principles of state policy on the development of English in higher education" developed by the Ministry of education and science of Ukraine in partnership with the British Council in Ukraine, the basic principles of the law "On the use of English in Ukraine", the recommendations of the Council of Europe on language education of 22 May 2018 on the key competences for lifelong learning.

Studying at higher educational institutions provides students with a complete development of the necessity to learn English and master it as a means of communication, cognition, self-realization and social adaptation in a multicultural world based on the awareness of the importance of learning foreign languages, especially English, as a means of communication and cognition in the modern world, increasing their competitiveness in the course of economic and social European integration.

The studies of R. Lado, G. Fischer, N. Uhlemann and other scientists demonstrate that for successful implementation of business contact it is not enough only to have an excellent command of the professional language, it is also necessary to have knowledge of the country whose language is being studied, its culture, traditions, customs, people, their habits, norms of behavior. Therefore, students need to be taught intercultural communication, for which it is necessary to know the culture of the country of the language being learnt (H. Weinrich, G. Neuner, M. Byram, E. D. Hirsch, M. Collier, G. Fricke, H. Hunfeld, and C. Fox). This should be one of the goals of foreign language teaching at an engineering university.

Studies show that the current and widely used methodological and software at engineering universities are mainly focused on the knowledge transfer, development of certain skills and abilities and, due to their objective features, do not allow to form the necessary level of students' socio-cultural competences. Consequently, the relevance of the research at the scientific and methodological level is determined by the following necessity to examine the conditions ensuring the effective development of sociocultural competences of university students.

The methodological model of competences description in foreign literature differs significantly from its understanding in modern national methodology. So, in the materials of the European Council the following types of competences are considered: general competences and communicative language competence.

General competences consist of the ability to learn, existential competence, declarative knowledge, and communicative language competence. Foreign authors provide definitions of professional competence as "in-depth knowledge", "state of appropriate performance of the task", "ability to carry out the activity" (W. E. Blank, R. M. Jueger, G. K. Britell).

**The purpose of the article is** to describe the elements of professional competence and to consider the possibilities of the discipline "English for Specific Purposes" for the future engineers' sociocultural competence development.

**The statement of the main material.** Considering the analysis of current researches, we will specify the concept of professional competence with regard to future engineers. In accordance with the above-mentioned, the professional competence of an engineer can be defined as the ability to implement mental functions and inborn abilities; to apply, on a

reflexive basis, personality qualities, professional knowledge, skills, abilities and competences typical for representatives of engineering profession, as well as life and work experience for the qualitative performance of professional activities.

Pedagogical practitioners consider sociocultural competence as a complex phenomenon including a set of components related to different categories. Among the components of sociocultural competence are the following: linguocountry studies component (lexical units with national-cultural semantics and the ability to apply them in situations of intercultural communication), sociolinguistic component (linguistic peculiarities of social groups, representatives of different generations, genders, social groups, dialects), socio-psychological component (mastery of socio- and culturally conditioned scenarios, nationally specific behavioral patterns and use of communicative techniques adopted in a given culture), and cultural component (socio-cultural, historical-cultural, ethno-cultural background).

The most characteristic features of intercultural communication are that the participants in the communicative process belong to different cultures and that the communicators are aware of their cultural differences from each other, since intercultural communication is primarily interpersonal communication in a special context. As such, the content and results of various contacts depend on the ability of their participants to understand each other and to come to an agreement, which is mainly determined by the ethnic culture of each of the interdependent parties, the people's psychology, and the values prevailing in a particular culture. The above-mentioned socio-cultural features determine the ethnic specificity of a nation. Particular attention should be paid to the concept of national psychology or people's mentality, as it determines the behavior of an individual in various situations of socio-cultural communication. Mentality is what allows us to uniformly perceive the surrounding reality, evaluate it and act in it in accordance with the norms defined in society and according to the patterns of behavior, while adequately perceiving and understanding each other [2]. Mentality is a deep structure of consciousness that depends on socio-cultural, linguistic and geographical factors. Mentality also determines the communicative behavior of an individual, which is understood as a set of norms and traditions of people's communication. Language analysis allows you to determine the style of a person's thinking.

It should be emphasized that in the process of communication between representatives of different cultures, the differences between these cultures lead to certain difficulties in communication, which is explained by different processes of decoding the received messages. Each participant in a cultural contact has its own system of rules functioning in such a way that the information sent and received can be encoded and decoded. However, any "channel of communication" involves the presence of obstacles and, as a result, the loss of information. Therefore, the recipient often gives a different meaning to the signs and symbols used in the message than the communicator, and therefore interprets and understands this information differently than the addressee would like. It suggests that the recipient's action or message may not fully meet the expectations of the sender and lead to misunderstandings between the parties to the communication. This is especially evident in the communication of multilingual communicators, where the linguistic and cultural barrier can not only be an obstacle in the communication process, but also lead to "communicative failures". The practice of communicating with foreigners shows that even a brilliant command of a foreign language does not exclude misunderstandings and conflicts with its native speakers. It is quite obvious that successful and effective contacts with representatives of other cultures are impossible without practical skills of socio-cultural communication. To solve this problem, it is necessary to develop cultural sensitivity, to develop the ability to correctly interpret specific manifestations of communicative behavior in different cultures and, therefore, to develop practical skills and abilities [4].

It should be mentioned that any competence in language knowledge is a consequence of its application, i.e. permanent speech practice. In order to realize the above-mentioned task, modern methodological science offers a system of interactive learning, as well as activity and personality-oriented approaches, which in their combination are able to provide students with the foreign language communication skills development for special purposes: in professional, scientific and business spheres. The most effective means of developing sociocultural competence is definitely staying in the country of the target language, immersion in the atmosphere of its culture, traditions, customs and social norms. However, since not all students have such an opportunity, it is necessary to develop

sociocultural competence outside the language environment.

The development of sociocultural competence is based on a certain content of teaching engineers a foreign language at higher educational institutions. The main components of this content are spheres, topics, situations of communication, philological and country-specific knowledge, language skills, speech, learning and compensatory phenomena, etc. Country studies knowledge is the most important part of the teaching content - mastering this knowledge is considered as a precondition for full-fledged communication of future specialists. Modern science considers the abovementioned knowledge as a component of sociocultural competence.

The information about the peculiarities of culture and models of speech behavior of native speakers is part of sociocultural competence, which involves the student's ability to understand and use the knowledge of national and cultural peculiarities of English-speaking countries in his/her speech experience. Sociocultural competence is a multilevel structure, which is not reduced only to the assimilation of the mental features of the native speakers of the target language. It includes linguo-country information, readiness for intercultural communication, a clear understanding of one's own task in communication, and strategic elements. Psychological aspects of communication are also important, including the student's ability to follow specific patterns of behavior using communicative techniques accepted in foreign culture [6]. This essential task of teaching a professionally orientated foreign language can only be achieved through regular speech practice and systematic observation.

Sociocultural competence is developed through studying authentic texts containing socio-cultural information about the country of the target language, its cultural features and traditions, as well as using auditory, visual, audiovisual and other sources. These materials, selected and organized in a proper way, are the most effective means of reflecting, understanding and mastering the specifics of the studied culture and speech behavior.

Using authentic materials allows students to get acquainted with the phenomena of another culture, to categorize its components. Teaching speech behavior in the classroom is realistic and even effective when using game technologies. However, the main difficulty lies in the fact that the teacher is not a specialist in the sphere, which will then become the professional scope of a future

specialist. Consequently, modern information and communication technologies can help the teacher by means of which the business side of foreign language speech can be taught and samples of business communication can be transmitted.

Immersion in virtual space is a very effective means of developing students' sociocultural competence. Certainly, this virtual space is an authentic virtual interactive language environment and a powerful tool of knowledge acquisition - the Internet, together with other modern computer technologies. The Internet provides a sufficient amount of contextualization, and properly modelled learning programs, thanks to multimedia tools, assist the student to better enter into the role offered to him/her. In other words, the student is an observer of the speech behavior of native speakers and through the analysis of what he/she sees, carried out under the teacher's guidance, draws appropriate conclusions about the specifics of the dialogue participants' communication. An important component of this work is the possibility to apply interactive learning technologies in playing similar (for example, as on video) speech situations of business communication both in pairs with the teacher and with classmates. At the same time with mastering socio-cultural realities, students practice important communicative skills of phonemic hearing and listening to specialized texts [1].

It should be highlighted that it is advisable to search for this kind of materials on the basis of modern social networks, blogs, electronic diaries and video hosting sites. Today it is an almost endless source of both linguo-country information and those that can be effectively used in teaching engineers the English for Specific Purposes.

In fact, the thematic composition of the content of open Internet resources is amazing in its diversity. The only problem is to choose the quality material based on which the observation of social and cultural peculiarities of native speakers will be the most effective. It should be mentioned that in today's reality the use of such materials in foreign language classes is recognized as one of the most powerful stimuli for learning, as they have a great influence on students' motivation, actualizing, among other things, their speech activity. At the same time, in the traditional educational-organizational model, the development of speech-communication skills, including professional skills, takes place through the implementation of exercises from textbooks and teaching aids, reading specialized texts.

Of course, in the practice of professional foreign language competence development, this technique is basic, but this type of work is considered monotonous and therefore ineffective. Observing real professional communication and the subsequent practice of this communication through role-playing is intended to form a set of knowledge and skills of future engineer that form the basis of both professional and socio-cultural competence. Besides, using video materials demonstrating a sample of professional communication of a famous person (for example, a famous inventor, a successful developer, a popular TV presenter, etc.) can produce the effect of the so-called "projection" of the future profession on specific individuals. This gives the student an opportunity to see the prospects of his/her future professional activity, and consequently, contributes to successful learning.

Working with video materials containing samples of professional foreign-language communication is based on the sequence of pre-text, text and post-text activities adopted in the methodology. At the pre-text stage, the lexicogrammatical side of the text is analyzed and possible difficulties are eliminated. The next stage is watching the video, and further discussion of the video, identification of nationally marked elements of speech behavior, and dramatization take place as part of the post-text work. It is important to emphasize another advantage of using ICT in teaching future specialists: the possibility to repeatedly refer to visual material, to review conceptually important points several times, to make their own charts and tables, to highlight key words important for text processing and its meaningful reproduction.

Nowadays, electronic textbooks and teaching aids, including those designed to teach future specialists how to communicate professionally, show their effectiveness in teaching practice. The functionality of these kinds of didactic materials allows the foreign language teacher to combine text, audio and video information, accompanying each lesson with links to Internet sources, adding necessary video clips, etc., and, consequently, to achieve learning objectives in a more systematic way. Advanced ICT helps a student to become an active participant in foreign-language professional communication by communicating with representatives of a particular profession (chat rooms, messengers, e-mail, etc.). When training professional communication skills in this way, students get an opportunity to practice the rules of business etiquette, while at the same time

perfecting their skills in such an activity as writing. This form of work is very useful, as modern companies conduct business correspondence based on popular chat rooms and messengers, and the document flow, carried out through electronic mailboxes, is necessarily accompanied by textual information.

The practice of introducing such forms of work confirms the necessity of training in dialogic foreign language communication, without which the formation and development of communicative and other professional competences in a foreign language will not take place. Modern information and communication technologies allow a foreign language teacher to provide students with a variety of electronic dictionaries containing lexemes of a particular field of knowledge. They will simplify the process of students' understanding of texts on specialty and, consequently, enrich their vocabulary to the extent that will be necessary for solving professional tasks in a foreign language.

**Conclusion and further research prospects.** To summarize, it can be stated that the tendencies of professional and sociocultural

competence development in close connection with each other are effective in quality teaching of English for Specific Purposes to engineering students. In university environment, when classes are in classrooms, it is possible to realize the tasks of developing foreign language professional communication skills by means of information and communication technologies, in particular, audiovisual learning tools. In this way, the application of knowledge in the context of sociocultural competence allows a future engineer to effectively integrate into the process of intercultural communication.

Generalizing the above-mentioned, we can conclude that sociocultural competence as an element of professional competence of future engineers can be developed in the course of teaching a foreign language at university.

In the future, the developed sociocultural competence will promote the personality growth, intelligence development, cultural tolerance formation, as well as professional career development of students, as they will be able to carry out successfully professional activities with business partners in a foreign language.

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