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THEORETICAL BACKGROUND FOR THE CREATION AND CONDITIONS FOR THE USE OF MODULAR TECHNOLOGY FOR FOREIGN LANGUAGE TRAINING OF STUDENTS OF A TECHNICAL UNIVERSITY

In modern conditions of expansion of international relations, scientific and technical cooperation, opportunities for internships abroad, work with technical documentation in a foreign language requires a high level of foreign language training of students studying in technical universities. Foreign language communicative competence becomes an integral part of the general professional competence of students of technical universities and provides an opportunity for future graduates to reach the international level of communication with professionals from other countries. There are various technologies used in foreign language training of students, but special attention should be paid to modular technology, which allows to present all learning in the form of a set of individual content blocks with specific competencies, organizational forms.

The purpose of the article is to review and analyze the theoretical background and conditions for the use of modular technology of foreign language training of students of technical universities.

Methodological and general theoretical basis of the study were domestic and foreign theories, concepts that reflect modern pedagogical and psychological theories of vocational education, scientific works of domestic and foreign authors on teaching foreign languages, problems of foreign language training of students, which reveals: ideas of philosophy of professional activity, basics of psychological theory of activity and methodological approaches to the organization of the educational process.

The theoretical significance of the article is as follows: the concept of «foreign language communicative competence» in terms of its structure and content; it is substantiated that the model of modular technology of foreign language training of students of technical high school develops ideas of competence-oriented education, allows to design goals, content, technologies that provide qualitatively new foreign language training, adequate to modern society requirements.

The above allows us to conclude that the technology of modular learning is not just a pedagogical technology used in teaching foreign languages, but a necessary condition for mastering a foreign language culture by creating favorable conditions for the development of future engineers as cultural and linguistic people with highly developed communication and cultural skills in solving communicative tasks.

Key words: *globalization, integration, academic mobility, scientific and technical information, intercultural communication, modular learning, Bologna process, humanitarization, personality-oriented learning, independent work, communicative tasks, educational material, communicative activity.*

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ТЕОРЕТИЧНІ ПЕРЕДУМОВИ СТВОРЕННЯ ТА УМОВИ ВИКОРИСТАННЯ МОДУЛЬНОЇ ТЕХНОЛОГІЇ ІНШОМОВНОЇ ПІДГОТОВКИ СТУДЕНТІВ ТЕХНІЧНОГО ВУЗУ

У сучасних умовах розширення міжнародних зв'язків, науково-технічного співробітництва, можливостей стажування за кордоном, роботи з технічною документацією іноземною мовою потрібен високий рівень іноземної підготовки студентів, які навчаються у технічних ВНЗ. Іноземна комунікативна компетентність стає невід'ємною частиною загальної професійної компетентності студентів технічного ВНЗ та надає можливість майбутнім випускникам виходити на міжнародний рівень спілкування з фахівцями з інших країн. Існують різні технології, що використовуються при іноземній підготовці студентів, однак особливої уваги заслуговує модульна технологія, що дозволяє представити все навчання у вигляді сукупності окремих змістовних блоків із конкретними компетенціями, організаційними формами.

Мета статті є огляд та аналіз теоретичних передумов створення та умов використання модульної технології іноземної підготовки студентів технічного ВНЗ.

Методологічну та загально теоретичну основу дослідження склали вітчизняні та зарубіжні теорії, концепції, що відображають сучасні педагогічні та психологічні теорії професійної освіти, наукові праці вітчизняних та зарубіжних авторів щодо навчання іноземних мов, проблеми іноземної підготовки студентів вищих навчальних закладів, в яких розкриваються: ідеї філософії, професійної діяльності, основи психологічної теорії діяльності та методологічні підходи до організації освітнього процесу.

Теоретична значущість статті полягає в наступному: уточнено поняття «іноземна комунікативна компетентність» з погляду її структури та змісту; обґрунтовано, що модель модульної технології іноземної підготовки студентів технічного вузу розвиває ідеї компетентнісно-орієнтованої освіти, дозволяє проектувати цілі, зміст, технології, що забезпечують якісно нову іноземну підготовку, адекватну сучасним вимогам суспільства.

Вищевикладене дозволяє зробити висновок про те, що технологія модульного навчання – це не просто педагогічна технологія, що застосовується при навчанні студентів іноземної мови, а необхідна умова оволодіння іноземною культурою через створення сприятливих умов для розвитку майбутніх інженерів як культурно-мовних осіб, які володіють високорозвиненими комунікативно-культурними вміннями під час вирішення комунікативних завдань.

Ключові слова: глобалізація, інтеграція, академічна мобільність, науково-технічна інформація, міжкультурна комунікація, модульне навчання, Болонський процес, гуманітаризація, особистісно-орієнтоване навчання, самостійна робота, комунікативна задача, навчальний матеріал, комунікативна діяльність.

Problem statement. The ongoing processes of globalization and integration of Ukraine into the world economic, technical, cultural, scientific and educational space, accompanied by the creation of joint ventures and industries, the exchange of scientific and technical experience, the expansion of cooperation between Ukrainian technical universities and foreign universities, companies and organizations in the field of exchange of scientific and technical information, the development of academic mobility programs for students and teachers, the creation and development of high technologies, have significantly increased the role and place of a foreign language in the system of higher professional education.

The current educational reforms are aimed at training a new generation of specialists – professionals, experts of scientific and technical information and progress, distinguished by flexibility of thinking and a creative approach to solving professional problems, tolerant perception and acceptance of global technologies and technical discoveries made by representatives of other cultures.

Today, it is not enough to possess only the skills, abilities and qualities that make a university graduate competent in a certain area of professional activity. Future graduates are required to speak at least one foreign language, which is a means of intercultural professional communication for obtaining and continuing education in a foreign language environment, implementing intercultural interaction in situations of everyday communication with direct contact with a native speaker, exchanging scientific and technical experience with a foreign colleague, compiling and conducting business correspondence in a foreign language, working with foreign information resources, functioning in an international team, while acting as harmoniously developed and creative cultural and linguistic personalities.

The importance of the humanitarian component, represented by the teaching of a foreign language and culture, in the general professional training of students of a technical university cannot be overestimated. Mastering a foreign language and culture makes a significant contribution to the development of personality, the formation

of moral consciousness and moral culture of highly qualified specialists.

Therefore, the strategic goal of training a future technical specialist is to form an active, creatively thinking person who knows a foreign language and culture at a high level, which ultimately determines the level of his qualifications and is one of the factors in the formation of a successful professional and social career of a future specialist.

The change of landmarks in the field of teaching a foreign language at a technical university led to the expansion of the functions of a foreign language as an academic discipline, and, as a result, its transformation from a secondary discipline into one of the most popular disciplines in the curriculum for training students of a technical university. In the context of the Bologna process, it is the practical knowledge of a foreign language by students that is in demand, and not just the ability to read and translate with a dictionary. Indisputable evidence of this is the fact that, acting as subjects of the educational process, students are faced with many situations that require them to possess the skills and abilities of intercultural foreign language communication in such areas of activity as participation in academic exchange programs, studying at a foreign university in joint educational programs, bachelor's and master's programs, study and research internships and internships at a foreign enterprise, presentations at international seminars and conferences (Borodina, 1997).

The response to the growing need for new generation specialists was the emergence of various models of teaching a foreign language in the higher technical schools of Ukraine.

Due to the obvious possibilities of a foreign language as an academic discipline in the general cultural, personal and professional development of a student of a technical university, the task of organizing and implementing a purposeful process of formation and development of foreign language communicative and cultural competence, which ensures the formation of a student as a cultural and linguistic personality, capable and ready to carry out intercultural foreign language communication in the context of further globalization of production, economy, society and education in general.

Due to the allocation of foreign language communicative and cultural competence as a strategic guideline for the training of global-

level specialists, the requirement to search for new technologies for organizing and implementing the process of teaching a foreign language in a technical university, which contribute to increasing the efficiency of its study and teaching, becomes especially relevant; development of new concepts, methods and forms of teaching, contributing to the formation and development of all components of foreign language communicative and cultural competence, determining the conditions, stages and levels of its development at all stages of teaching a foreign language at a university.

One of the most effective and promising technologies for organizing the process of teaching a foreign language at a university, the author of this study considers modular learning. To a large extent, this is due to the Bologna process, one of the requirements of which is the transition to a modular organization of educational programs. At the same time, the process of teaching a foreign language to students of a technical university is no exception, since it requires a significant increase in the share of independence and activity of the student in choosing an individual educational trajectory for mastering foreign language communicative and cultural competence, which contributes to the formation and development of the student as a cultural and linguistic personality; increasing the level of motivation, activity and conscious attitude of students to the study and further use of a foreign language as a means of effectively fulfilling future professional activities in the context of the globalization of the modern world (Choshanov, 1996).

Thus, the above determines the relevance of creating the concept of modular teaching of a foreign language to university students, as this will solve such important tasks as the integrated implementation of the communicative and cultural orientation of the educational process; mandatory consideration of the needs and interests of students related to the achievement of such a level of foreign language communicative and cultural competence, which is sufficient for effective intercultural professional communication; increasing the conscious perspective of learning based on the formation of students' skills of self-education, self-diagnosis and self-control in the study of a foreign language and culture; implementation of a pedagogical partnership between teachers-linguists and teachers of technical departments,

which ensures the integration of foreign language training into the general professional training of future specialists on the basis of specially designed modules.

Research analysis. The possibilities of using modular training in the educational process are considered by many researchers (Prokopenko I., 1981; Choshanov M. A., 1986, 1996; Borodina N. V., Erganova N. E., 1988; Yutsyavichene P. A., 1989, 1990; Lastochkin A. N., 1998; Sheveleva N. L., 1998; Kuzmenkova Yu. B., 1998, 2002; Markova E. S., 2004, etc.). However, the theoretical and methodological foundations for their implementation in the system of foreign language training of students of a technical university have not been practically worked out. Thus, there is a contradiction between the objective need to use modular technology in the system of foreign language training of future engineers and the insufficient degree of development of the theoretical and methodological foundations for designing and implementing the educational process in a foreign language using modular technology.

The **purpose** of the study: to consider and analyze the theoretical background for the creation and conditions for the use of a modular technology for foreign language training of students of a technical university.

Presentation of the main material. In the context of integration in the field of higher education within the framework of the Bologna process, there is a need to revise approaches to the issues of training students of technical universities. The ongoing changes in the economic, political, and social life of society dictate new requirements for graduates of technical universities: highly qualified specialists from technical universities, "having at the same time a holistic education in the humanities," are becoming in demand (Kroshe, 1996).

Interest in the humanitarization of higher technical education is due to several reasons. One of them is the level of culture and education of a person. The higher this level, the easier it is for a specialist to solve his professional tasks. Another reason is the obligatory condition for broad humanitarization in the fundamental training of students of a technical university.

The main task of the humanitarization of higher technical education through a foreign

language should be the introduction of students into the historical, cultural and value context of technology.

Another important task of humanitarization is the development of a student as an individual, the formation of «ability for creative activity according to the criteria of universal values and culture» (Kroshe, 1996).

Humanitariization of students in a technical university through a foreign language enriches the worldview of students, develops their intellectual, emotional and activity sphere through the organization of training using specially selected foreign language texts, tasks and exercises. At the same time, the topics of the texts should take into account the interests of students and contain information of both a professional and humanitarian nature. Authentic audio and video materials should introduce students to the world of their future profession, deepen their knowledge of the history and culture of the countries of the language being studied, introduce them to existing world problems, and develop creative thinking. The system of exercises for the development of communication skills contributes to the desire to analyze and evaluate the moral essence of one's own actions and the actions of other people from the point of view of accepted moral standards. Foreign language training of students of a technical university is a means of humanitarization of higher technical education, which makes it possible to increase the motivational readiness of students to perceive the humanitarian content of educational materials in a foreign language. The development of a high level of humanitarian culture will provide the student of a technical university with the necessary skills for negotiating, resolving conflicts; will promote creative growth, will allow to implement new professional ideas, motivate people, etc.

The main goal of using modular training in the educational process of a technical university is to improve the quality of foreign language training of students, which is accompanied by the implementation of the paradigm of student-centered learning, as well as the identification and development of the creative potential of the student's personality. We see the specifics of foreign language training of junior students of a technical university in the following: multi-level education; a system of uniform requirements

for the level of foreign language proficiency; orientation to the requirements of international certification exams; systematic monitoring and operational feedback; the mechanism of «inter-level transition» (students with a high level of educational achievements move to groups of a higher level based on the results of the final control), etc. Taking into account this specificity, we have identified the following pedagogical conditions for the use of modular technology in the system of foreign language training of future engineers (Sheveleva, 1998):

1) modular technology is aimed at preparing the student for various types of foreign language communicative activities;

2) the content of the training is presented in the form of a modular program with a flexible structure, consisting of training modules, the assimilation of which is carried out in accordance with the didactic goal, which is formulated for each student and contains an indication of the volume and level of assimilation of the studied material;

3) the volume, structure and methods of presenting information in the modules depend on the specific educational material;

4) the modular program adapts to the level of foreign language training of the student in order to advance him to a higher level of foreign language proficiency, thereby providing a differentiated approach; the presence of modules in printed and electronic form allows the teacher to individualize work with individual students;

5) different forms of work with the educational material of the module are used, because the linguistic and extralinguistic content of each of them differs in volume and degree of complexity, provided that unified requirements are presented to the program;

6) the methodological principles of developmental education are implemented, which allow creating the background for creative activity and the development of the student's independence in achieving a specific goal in the process of working with the module material;

7) the control system is implemented in a communication-oriented format and includes input, boundary and final control, and is compiled for the student.

Conclusions. The study showed that the formation and further development of foreign language communicative and cultural competence of students of a technical university takes place not only in the process of classroom work, but also in extracurricular independent work. Under independent work, the author of the study understands an integral component of the system of modular teaching of a foreign language, which is implemented in classroom and out of class time, during which students actively implement educational and cognitive activities aimed at mastering foreign language communicative and cultural competence in all the variety of its components and subcomponents, which, in turn, contributes to improving the quality of their education in general and their development as cultural and linguistic personalities.

The effectiveness of modular teaching a foreign language is determined using a set of control measures. It is obvious that the control in the conditions of modular teaching a foreign language is designed to solve a set of problems, firstly, to determine the degree of achievement of the complex didactic goal of the program of modular teaching a foreign language at each of its stages, and secondly, to identify the efficiency of the implementation of modular teaching of a foreign language to students of technical university.

The foregoing allows us to conclude that the technology of modular learning is not just a pedagogical technology used in teaching students a foreign language, but a necessary condition for mastering a foreign language culture by creating favorable conditions for the development of future engineers as cultural and linguistic personalities who own highly developed communicative and cultural skills that can be used in solving communication problems.

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