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FOREIGN LANGUAGE AS A KEY FACTOR FOR ACADEMIC MOBILITY OF FUTURE ENGINEER-TEACHERS

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Ukraine's intensive integration into the world and European educational community, as well as ensuring the implementation of the Bologna Declaration's key principles - adaptation to the European educational standards, mobility, and professional competition, actualizes current trends to improve and enhance the quality of foreign language education in Ukrainian higher engineering educational institutions, develop appropriate professional and everyday communication skills in future engineer- teachers, and provide scientific and methodological support from academic staff. The purpose of the article is to identify the role of foreign language teaching at higher engineering educational institutions in the context of future engineer-teachers' academic mobility, to define the skills and strategies which are the focus of English communicative course for academic and professional purposes. Based on the analysis of practical experience in teaching English communicative course for academic and professional purposes, the article deals with the skills and strategies which are in the focus of the above-mentioned course; the advantages of teaching an academic English, providing satisfaction of professional and educational needs of future engineers-teachers, development of academic mobility and increasing students' motivation to participate in the international projects. The authors highlight some challenges arising during the integration of the course into the educational process and outline certain requirements for a foreign language teacher and the organizational process. The paper defines the goals and objectives of foreign language training and organizational forms of teaching foreign languages to support students' academic mobility at a higher engineering education institution; emphasizes the importance of creating specialized courses aimed at facilitating students' adaptation to the academic process abroad. The authors propose to correct the goals and update the courses of foreign language training for students at higher engineering educational institutions, reorienting them from mastering all types of speech activities to the development of a secondary linguistic personality; to make corrections to the content of foreign language education - to supplement the existing knowledge system of national and cultural specifics and realities of the English speaking country and to clarify the areas of communicative activity - topics and communicative situations with programs for their deployment.

Keywords: academic mobility, foreign language, English for academic purposes, intercultural communication.

Тупченко В.В., Пасічник М.В. «Іноземна мова як провідний чинник академічної мобільності майбутніх інженерів-педагогів».

Інтенсивна інтеграція України у світовий та європейський освітній простір, а також забезпечення реалізації ключових принципів Болонської декларації - адаптації до європейських освітніх стандартів, мобільності та професійної конкуренції - актуалізує сучасні тенденції до вдосконалення та підвищення якості іншомовної освіти у вищих інженерно-педагогічних навчальних закладах України, формування у майбутніх інженерів-педагогів відповідних навичок професійного та повсякденного спілкування, науково-методичної підтримки з боку науково-педагогічних працівників. Мета статті - визначити роль викладання іноземної мови у вищих інженерно-педагогічних навчальних закладах у контексті академічної мобільності майбутніх інженерів-педагогів, окреслити навички та стратегії, на розвиток яких спрямований комунікативний курс англійської мови для академічних та професійних цілей. На основі аналізу практичного досвіду викладання комунікативного курсу англійської мови за

професійним спрямуванням розглядаються навички та стратегії, на які спрямований вищезгаданий курс; переваги викладання академічної англійської мови, що забезпечують задоволення професійних та освітніх потреб майбутніх інженерів-педагогів, розвиток академічної мобільності та підвищення мотивації студентів до участі у міжнародних проектах. Автори висвітлюють деякі проблемні питання, що виникають під час інтеграції курсу в освітній процес, а також окреслюють певні вимоги до викладача іноземної мови та організаційного процесу. У статті визначено цілі та завдання іншомовної підготовки та організаційні форми викладання іноземних мов для підтримки академічної мобільності студентів у вищому інженерно-педагогічному навчальному закладі; підкреслено важливість створення спеціалізованих курсів, спрямованих на полегшення адаптації студентів до академічного процесу за кордоном. Автори пропонують скоригувати цілі та оновити курси іншомовної підготовки студентів вищих інженерно-педагогічних навчальних закладів, переорієнтувавши їх з оволодіння всіма видами мовленнєвої діяльності на розвиток вторинної мовної особистості; зробити корективи у змісті іншомовної освіти - доповнити існуючу систему знань про національно-культурну специфіку та реалії англійської країни та уточнити сфери комунікативної діяльності - теми та комунікативні ситуації з програмами для їх реалізації.

Ключові слова: академічна мобільність, іноземна мова, англійська мова для академічних цілей, міжкультурна комунікація.

Problem statement. The experience of Ukraine's European integration during the war has a unique character. Fighting back the large-scale armed Russian intervention, suffering huge human, financial and economic losses, the country has gained the status of a candidate for EU membership and continues its European integration in all spheres, deepens partnership with the EU in sectoral areas, implements the European Commission's recommendations and puts into practice the requirements of the Association Agreement. An important component of the joint opposition to Russian expansion is the intensification and development of economic contacts between Ukraine and the EU, including the liberalization of mutual trade and the introduction of visa-free regimes in various areas of cooperation. The European integration transformation of the Ukrainian national economy involves fundamental changes in the content, principles, organization and methods of training highly qualified specialists who are competitive in the global labor market. The modernization of the national system of higher engineering education based on the Bologna principles has already demonstrated its effectiveness: higher engineering education is becoming increasingly successful, meets the needs of modern society and aims for continuous development and self-improvement. Ukrainian engineering universities are actively participating in the modernization of educational activities, applying the positive experience of several leading foreign countries, and have already achieved significant practical outcomes: the curriculum content is being changed to reflect the market orientation and the integration of graduates into professional society. In the context of Ukraine's active integration into the world and

European educational environment, the problem of foreign language proficiency of future engineering specialists is especially relevant. Developing foreign language professional competence allows a future professional to successfully engage in interpersonal and interlingual communication. In addition, fluent foreign language communication provides the opportunity to establish and maintain effective business, professional and cultural contacts, and contributes to the general cultural and professional development of the student's personality, professional and social mobility.

The complexity of these factors, as well as ensuring the implementation of the Bologna Declaration's key principles: adapting to the norms and standards of the European educational environment, mobility, and professional competitiveness, highlights the importance of improving and enhancing the quality of foreign language teaching in Ukrainian engineering universities, developing appropriate professional and interpersonal skills of future engineers, and providing scientific and methodological support from the academic staff of higher educational institutions. A particular task is to educate students who are prepared for further studies at European universities. This training should be based not only on the traditional development of all foreign language aspects, but also on a significant enhancement of the country and cultural background section, which provides for additional knowledge about the diversity of cultures, languages, and national educational systems in order to ensure the effective integration of future engineers into the European higher educational system. The innovative educational model should provide a motivated approach to learning a foreign language as the main means of international

communication, allowing future specialists to join the European information and educational environment at the earliest stage.

Methods of Research. The research included several stages - the study of the issue and current trends in the field of students' academic mobility development in the field of engineering and pedagogical education (analyzed the regulatory and legal documentation as well as scientific and pedagogical literature). Particular attention was paid to the study of Internet available information on the experience of Ukrainian and foreign engineering universities in organizing international cooperation and providing this process with the necessary psychological, pedagogical, organizational and informational support. The survey and interviews with Masters of Ukrainian Engineering Pedagogics Academy (Kharkiv) were carried out to identify students' interest in short-term (85%) and long-term programs of academic mobility (51%); the main factors influencing the decision to participate in international activities and academic mobility (the need for professional development and self-realization - 74%; the need for new professional information - 55%; the need to improve foreign language competence - 85%; the possibility of further work abroad - 72%); factors that might prevent academic mobility (poor foreign language competence - 79%; presence of cross-cultural communication barrier and failure to communicate in an foreign language environment, culture and mentality - 68%; financial factors - 65%; low socio-cultural competence - 32%; relevance and importance of information and educational seminars for students and young academics in the Ukrainian Engineering Pedagogics Academy (UEPA) (92%); the need for educational and methodological support to develop the readiness for academic mobility (95%).

The purpose of the article is to identify the role of foreign language teaching at higher engineering educational institutions in the context of future engineer-teachers' academic mobility, to define the skills and strategies which are the focus of English communicative course for academic and professional purposes.

The statement of the main material. Nowadays, academic mobility abroad has a systemic character, coordinated at the level of state policy, but in Ukraine it remains a spontaneous and personalized process. The key aspects of the Resolution "On Approval of the Regulation on the Procedure for Exercising the Right to Academic Mobility" of the Ukrainian Cabinet of Ministers dated 12.09.2015 include ensuring the right of all participants in the educational process to engage in

academic mobility programs; clear formulation of academic mobility types and programs; approving the principle of credits transfer in the context of the European Credit Transfer System (ECTS), in particular by comparing the curriculum content rather than course titles; and retaining students' places at their current university [1]. The procedure for academic mobility by all participants in the educational process is a significant step in the implementation of the Ukrainian Law "On Higher Education" and the development of effective tools for the internationalization of Ukrainian higher engineering education institutions.

The issue of effectively solving the problem of implementing academic mobility at the level of a particular engineering university, region, or country requires careful study, analysis, and discussion at all levels, as it is considered an important attribute of modern higher engineering education, a precondition for its further modernization, and a key requirement for the professional development of future engineer-teachers.

Based on the analysis of the scientific and pedagogical literature, it is reasonable to distinguish the following types of academic mobility: vertical (a student studies at the other university), horizontal (studying at the other university for a semester or a year), internal (students and teachers are sent from one university to another for a certain time period) and external academic mobility (students and teachers are admitted to another university). Currently, there is also virtual mobility, when students from different countries can study distantly. Students' virtual academic mobility can be described as online learning at another university using information and communication technologies [2].

In addition to training in the profession, the purpose of academic mobility of undergraduate and graduate students may also include internships. At present, this type of academic mobility is considered to be the most perspective, as it provides students with the opportunity to acquire the necessary professional competencies of the international level.

Both students and graduates of all higher education programs (bachelor's, master's, and PhD) are considered to be subjects of academic mobility. For postgraduate students, involvement in academic exchanges is somewhat different from for undergraduates: they also attend advanced specialty courses, but at the same time they are engaged in research projects, collect information on the topic of their dissertation research in libraries or archives, carry out experiments in laboratories, participate in scientific conferences, and attend

individual consultations with their supervisor. Academic mobility also involves faculty and administrative staff. In this case, the content of an academic visit may include elements of research and education as well as teaching. For example, while conducting research or attending workshops and trainings, academics can also give lectures, advise undergraduate or graduate students. In the context of our study, we will consider "academic mobility of students" as the relocation of students for the purpose of studying from one higher education institution to another for a limited period of time within their country or abroad [3].

Like any other type of activity, academic mobility has its advantages (access to European educational resources; additional admission of foreign students to Ukrainian engineering universities and increased budget revenues from the export of educational services; optimization of students' and teachers' educational and professional motivation; improvement of teaching quality; motivation to master a foreign language, as international projects require a sufficient level of foreign language proficiency).

Problems related to academic mobility may arise from differences in educational programs in different countries; variations in the measurement of the student academic workload of Ukrainian engineering universities and higher educational institutions in partner countries; difficulties in integrating specific blocks to ensure the integrity of education; lack of knowledge or poor proficiency in foreign languages; and, finally, due to differences in cultures and divergent value systems and students' preferences in different countries. To participate in academic mobility, the required level of foreign language proficiency (most often English) should not be lower than B1-B2, but this does not solve all problems. Program participants may face the following challenges: lack of understanding of native speakers, difficulties in everyday communication, problems of intercultural communication and non-verbal communication, inability to communicate in English, and general lack of confidence due to the new language environment [4].

The analysis of students' language difficulties arising in real-life foreign-language professional communication is certainly an important factor in designing the content of foreign language teaching at an engineering university. A significant role in this case is the development of appropriate teaching aids involving both psychological personal development and having both educational and enlightening significance.

Including students in international projects, organizing internships in foreign engineering universities, participating in exchange programmes, working with foreign delegations and invited specialists will allow Ukrainian students, on the one hand, to receive an education corresponding to international standards, and, on the other hand, to outline directions of further development, where using a foreign language will have a significant and sometimes even a crucial role [5].

Due to the increasing availability of new ways to implement students' academic mobility, the functions of engineering universities in this sector have been significantly expanded, namely, there is a need not only to guarantee future engineer-teachers a sufficient level of foreign language training, but also to encourage students to practice the foreign language in academic and research activities at a foreign university. Thus, it is advisable to adjust the goals and update the foreign language training courses for students in engineering universities, reorienting them from mastering all types of speech activities to the development of a second language personality, i.e., it is necessary to develop the verbal skills inherent in native speakers to reflect the surrounding reality in the process of communication in order to achieve social and professional goals. It is also necessary to make improvements to the content of foreign language education - to supplement the existing system of knowledge of national-cultural aspects and realities of the target language and to specify the spheres of communicative activity - topics and communicative situations with programs for their implementation. In our opinion, the main activities of engineering universities under these conditions are to motivate students to participate in international projects and scholarship programs as early as the first year of study, to encourage them to grow professionally and personally in the international educational environment, and to involve students in a foreign language university environment. In other words, we should try to develop university competence in future engineer-teachers, based on linguistic knowledge, skills and abilities necessary for understanding, summarizing, studying academic content in lectures and practical classes at a foreign university; methodological knowledge, skills and abilities necessary to participate in seminars, public speaking, conducting master classes, writing an article, choosing and substantiating the research topic (course work or master's thesis), work with documents; communication knowledge, skills and abilities necessary for the interaction of students and teachers at a higher educational institution.

That is why many Ukrainian higher educational institutions (in particular and Ukrainian Engineering Pedagogics Academy) implement specialized courses of foreign language communication in academic and professional environment for academic purposes, as well as courses of preparation for international and national exams, thus helping to integrate students into a foreign university and to become part of a different society in order to successfully complete the study program. An important component of this training should also be the development of certain student's personality traits, such as tolerant attitude to people of other nationalities, to the peculiarities and values of another culture, respect for the rules and behavioral norms applicable in another university environment, as well as preservation of one's culture and the ability to properly represent it.

Therefore, the problem of developing foreign language communicative and intercultural competences in the context of teaching foreign language students for academic mobility is of particular relevance. Practitioners emphasize the importance to develop academic communicative competence in a foreign language course for academic and professional purposes and consider it as the main task of the course to develop students' ability to learn and carry out their own research in English. Achieving this goal, in their opinion, contributes to the development of students' general academic literacy (mastering foreign language reading and writing skills), which is an important requirement for successful study at a foreign higher educational institution [6].

Foreign language course for academic and professional purposes has specific characteristics: a foreign language is learnt for a specific purpose, namely to communicate in an academic environment; the developed skills and language are determined by analyzing the needs of students and meet their academic needs; the course is usually time-limited; course is aimed at adult audience (Masters).

In this case, academic English is equivalent to the development of learning skills - techniques and strategies used in foreign language reading, listening or writing for academic purposes [7]. The development of students' foreign language skills in the course is closely related to the formation and development of general academic skills: students should learn to search for, evaluate, analyze and synthesize information; classify and categorize foreign language content; compare and contrast; plan a written expression in a foreign language, develop a working draft, edit it and then write the final text; follow the given limits and frames; evaluate their

own work and correct others'; and scheme information. These skills are considered as an important component of a foreign language course for academic and professional purposes, but we emphasize that it is not only the above-mentioned skills required to be developed in the course.

Two promising sub-sectors can be identified in language support for academic mobility. The first one is language courses designed to improve students' foreign language competences. These courses focus specifically on preparing students to master educational programmes abroad. The second sub-sector is preparation for international foreign language examinations. Foreign language training, including certification examinations, is carried out by formal and non-formal educational organizations, as well as in the field of informal education [8]. In the field of formal education foreign language courses and additional education programmes are implemented either by traditional structural units of university (institutes, faculties, departments), or specially created units (for example, at the department of foreign language training, European integration and international cooperation of the Ukrainian Engineering Pedagogics Academy there are annual English language courses for students and teachers).

Intercultural communication in a foreign language environment requires students who join academic mobility to have general cultural training, to develop general cultural competence, including the ability to accept another culture as a value, awareness of universal cultural ideals and values, readiness for cooperation and partnership, etc. In this regard, it should be emphasized that students' achievement of foreign language communicative competence is impossible without knowledge and understanding of the linguistic and socio-cultural peculiarities of the Bologna Process countries, which are interpreted in the context of general cultural readiness for mobility. According to practice, teaching a foreign language at engineering universities in the process of developing students' academic mobility readiness cannot be possible without studying the academic culture of the country where the student is to study, developing an adequate general cultural view of the educational, historical, cultural, socio-political resources of the host country.

Therefore, the powerful resource for developing students' readiness for academic mobility is the foreign-language scientific clubs organized by university students themselves, as well as the involvement of students in information and educational seminars. The department of foreign language training, European integration and

international cooperation of the Ukrainian Engineering Pedagogics Academy holds monthly meetings of the student scientific club and Euroclub meetings.

Conclusions. Consequently, the purposeful activities of engineering universities to motivate students to join international projects and contests, informing them about the positive experience of students gained in international educational programmes, opportunities to study at foreign universities, and preparing for international exams contribute to the intensification of academic mobility of future engineers. Accordingly, the Ukrainian students' studies at a foreign university should be preceded by a certain period during which they will be able not only to take intensive foreign language training, but also to join programmes aimed at helping them to adapt to the academic process abroad. The presented approach to the academic mobility development has a universal character and could be recommended as

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an educational model considering the variable qualification requirements for future engineers, it could allow a student to understand the connection between the differences in the culture of a foreign country and the academic mobility context. At the same time, foreign language communicative competence as one of the factors in developing students' readiness for academic mobility should be developed taking into consideration a general cultural approach, focus on a wide range of educational and training tasks, and require special methodological support.

That is why we consider that it would be reasonable to continue focused and systematic activities to improve and promote foreign language learning at engineering universities, to provide the necessary conditions for preparing students for participation in international exchange programmes, and to accumulate positive experience of academic mobility at Ukrainian engineering universities.

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