

## ESP MATERIALS FOR AERONAUTICAL STUDENTS

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Foreign language studying is an essential tool that helps students to expand their knowledge, to gain new experience, and to function successfully in the professional field. The need for highly-skilled specialists in technology, engineering, business and other fields has led to the necessity of English for Specific Purposes learning and teaching. The higher education institutions in Ukraine face a lot of challenges dealing with ESP programs, materials, students foreign language proficiency, means of studying etc. ESP teachers are responsible for program developing, course designing, materials, and teaching approaches selecting. ESP learning process differs from EFL one. The ESP studying should be concentrated on the skills and knowledge that can be applied to professional needs. To meet all the requirements of ESP teachers and learners, the studying process must be provided with modern and authentic materials. There is a lack of available course books for such field as Aircraft and Rockets Building. Thus, the problem of studying materials was solved by the teachers. A lot of factors are taken into account in the process of textbooks and distant courses developing. Review of learning materials developed for aeronautical students is presented in the paper. The advantages of distant course designed for ESP students self-work are considered.

**Keywords:** ESP teaching; learning materials; distant courses; terminology trainer; self-work; authenticity.

**Introduction.** As a member of the Bologna Process, Ukraine's main task is to develop the national education system which can be competitive in the European space. To meet this requirement it is necessary to develop a new concept of education, implement modern technologies for effective studying. Thus, the policy of the country is aimed at the modernization of higher education, development and introduction of innovative approaches and methods of studying, and further integration into the European community [3, c.8]. Ukraine needs educated young specialists in different branches who will be able to use their potential for the benefit of political, economic, scientific, cultural, social development of the country. In modern society knowledge of a foreign language by the citizens of the country indicates the high level of education, culture and communication skills of people. Foreign language is an indispensable part of training highly qualified specialist. Professional competence, the ability to make decisions immediately, adapt to complicated working conditions, respond to market demands, creativity, international communication and cooperation are the main requirements stated by the employers nowadays.

Foreign language learning and teaching are undergoing considerable changes according to the new national policy aimed at European integration. Foreign language teachers try to make their contribution to creating an ideal learning environment for modern students. They develop new studying materials that are compatible with the modern educational curriculum. Teachers provide innovative technical means, improve the learning process by means of appropriate studying approaches.

**Problem statement.** Foreign language communicative competence is a component of professional competence. English as a global language is becoming more and more popular for business, science, culture. It is required for students to be a competent specialist capable of exchanging experience, take part in international conferences and projects, and communicate with foreign partners. But knowledge of General English is not sufficient for real-life communication in such fields as aeronautics, engineering, science etc. Students in technical higher education institutions are taught English for Specific Purposes which meets the students' needs for their future career activity and job promotion.

In order to get the best results in teaching English for Specific Purposes it is necessary to identify the features of this discipline, to state the main purposes, to define the tasks teachers and the interests of ESP learners, to select the appropriate materials capable to match the studying process, to provide innovative technologies and modern methods. ESP is defined by the following characteristics: it concentrates more as a language in context than on teaching grammar and language, it meets the specific needs of students; it is focused on studying language functioning in real life.

Despite the fact that ESP appeared in the 1960s, it follows the different pace of development in various countries. Taking into account the purposes of a national policy of education, it is evident

that Ukraine is among the countries where ESP studying is rapidly developing. However, there are some factors which have a negative effect on ESP learning and teaching: the absence of modern textbooks for students of certain fields, lack of classroom hours, the level of students' knowledge and motivation. Our country needs solutions to improve the situation in ESP teaching and learning and to get the successful results in training highly-qualified specialists. Ukraine is among several countries that have potential in aircraft and rocket building. Consequently, it needs young engineers whose qualification satisfies European standards. The English language is an important part of engineers' training. Students can find and read a lot of information presented by the Internet resources, but there are no course books providing the appropriate materials for students of this particular field. This issue was solved by English language teachers and a set of ESP materials for students of Airspace Systems Faculty is presented in the article.

More and more attention is paid to the process of ESP teaching for students of technical specialties. This question was researched by many foreign and Ukrainian authors. The problem of foreign language communicating competence was studied by L.B. Kotlyarova (1990), O.B. Tarnopolsky (1999, 2002), N. Brieger (2006). M. Ellis and D. Johnson (1994) emphasized the importance of selecting and adapting the materials for particular fields. The materials should be based on learners' needs, focused on the appropriate topics and include tasks and activities that practice the target skills areas [6, p.115]. A.M. Averina, V.P. Kotkova devoted their efforts to the investigating the problem dealing with the professional skills development of students. Some authors made their contribution to investigating such question as the importance of students' needs analyses (M. Long and R. West) and the development of ESP curriculum (W. Hullen).

The **purpose** of the article is to state the factors that influence successful ESP acquisition, to describe the set of the materials developed for teaching students in the field of Aircraft and to define whether the materials meet the students and teachers needs and requirements.

**Factors related to ESP learning.** English for Specific Purposes focuses on knowledge and skills required for student's future job. Highly qualified specialists training should be based on the materials that can be adapted to their professional situations [1, c.3]. The fact that the senior students are more conscious and they are aware of the foreign language importance is a great benefit for both teachers and learners [7, p.6]. The primary task for a teacher is to set the goals and develop the program for organizing an effective ESP course. In order to obtain good results in ESP teaching, it is important to consider students' capabilities, their level of knowledge, and the students' contribution to the learning situation [8, p.2]. An ESP course must be provided with the materials which help to organize effectively the studying process, to create a positive environment, to develop and improve skills in all kinds of studying activities. New materials should be linked with the ones already learned by students. Developing the programs and materials it is important to take into account students' motivation. It is a powerful factor that affects the success of ESP learning. An ESP teacher has to perform many functions. His or her role is not limited by the teaching activity only. The term "ESP practitioner" is more appropriate as the teacher becomes the person who provides the materials, collaborator, course designer and researcher [5, p.11]. As students' professional branch is outside foreign language teachers' field, teachers are not the primary source of technical notions and phenomena knowledge. In this case, students have better awareness of the content of material. In order to help students activate their subject knowledge and cause the wish to train their foreign language skills the teachers' role is to create real communication atmosphere in the classroom.

**Materials for ESP learning.** It was mentioned earlier that such fields as Aircraft and Rocket Building, Aeronautics, Avionics are not provided with available course books. Thus, the teachers faced the problem of selecting and developing appropriate materials which improve ESP teaching and learning, consider students' interests and needs, and meet such factors as: compatibility with the syllabus, authenticity, curiosity stimulating, provision of all types of activities to practice and improve writing, reading, listening and speaking skills, useful vocabulary. Taking into account the fact that students' work is divided into practical and self-study training, it was necessary to provide the materials for both types of activity. Authentic texts remain the main source of ESP learning which gives provide the background for educational communication [2, c.25]. Great attention was paid to the selecting of materials. Due to interdisciplinary cooperation, these materials are based on subject-

specific topics. They comprise information dealing with the history of aviation, types of aircraft, structural parts and components of planes and rockets, principles of aerodynamics. The textbook for practical work covers the 3<sup>rd</sup> and 4<sup>th</sup>-year curriculum and is the main source for ESP learning [2]. Each unit contains two texts concerning the same topic. The first texts in the units introduce the topic and present the most important information and descriptions of technical notions and phenomena. It is well-known fact that vocabulary is successfully taught in context. Thus, the texts for reading are rich in professional terms and facts that help to expand students' knowledge in their particular field. The texts are followed by the set of related lexical and grammar tasks. The availability of pictures, diagrams, and schemes help students to learn and understand the subject better. The second text in the unit deals with the history or practical applications and supplements the additional facts. The topics are accompanying by authentic audio materials. Problem-solving and situational exercises promote learners' motivation and help to use their knowledge and skills.

Many assignments provide group work which stimulates communication and interaction in the classroom. Role plays "Aviation and Global Warming", "Aviation Objects in Stand hall" are used during the studying process as an effective means to intensify learning, activate students' creativity and professional knowledge, get additional skills and experience which can be applied to a future career. As the main purpose of the role play is to simulate the professional situations, special attention should be paid to selecting the topic and materials. Successful implementation of this activity depends on its reality, modern subject, interesting scenario and theoretical knowledge of students. As mastering communicative foreign language competence is one of the main objectives of the curriculum, the assignments in the textbook are communicative-oriented.

**Self-study work materials.** Self-study work is a part of ESP syllabus. This type of students' activity is aimed at fulfilling individual tasks as reading subject-oriented texts, additional information searching and processing to master new materials, to improve understanding of the profession-oriented topics. Self-study work can be successful when students are interested in studying individually. This type of learners' work needs special approach, effective organization, and system of assessment. As modern students are digital natives, it is evident that E-learning can interest and motivate them. Moodle platform is an effective solution for creating educational recourses. Its main benefits are easy access, interactivity, independence in terms of time and place of studying, self-paced learning, immediate results. Distant courses in ESP have been developed for students of Airspace Systems Faculty. Due to the available tools of Moodle platform, it is possible to present information for students in different ways. The activity of students is concentrated on doing tasks dealing with grammar revision, vocabulary training, academic writing, audio and video materials processing. All the materials selected for distant courses are compatible with the topics studied by the students during their practical work.

Nowadays a qualified technician should be able to use a foreign language for information exchange in the process of intercultural communication. Communicative competence development is the main purpose of ESP teaching in nonlinguistic higher education establishments. Much attention is paid to the formation of lexical skills, being the basis for all other communicative skills. Terminology training is aimed at understanding the term meaning and predicting it in lexical structures, using it in accordance with communicative situations, accumulating of terms and their memorizing. Profession-oriented texts and related tasks help students to train and enrich vocabulary.

The solution of the problem of ESP vocabulary teaching is the distant course "Terminology Trainer for Aircraft" [1]. The course has significantly different structure. Its purpose is to improve the active professional vocabulary of students. It contains 200 widespread terms in the field of Aircraft and Rocket Building. This studying resource is characterized by terms systematization, variety of exercises aimed at automatic terms memorizing, and lexical units introduction in different ways. Due to Moodle platform tools various kinds of tasks based on training terms using, spelling, and pronunciation were developed. This approach is based on the idea that each term is used at least eight times in exercises and presented in visual and verbal manner. Such categories of each term as a definition, Ukrainian equivalent, an example of terms using in authentic materials, related picture, and pronunciation are used in the terminology trainer. This approach contributes to the learning process intensification, the expansion of the ways of teaching materials presenting, new forms of students work evaluating, cognitive activity stimulating.

In ESP acquisition, students have difficulties with authentic texts. These problems can be dealt with the poor mastering of a foreign language, lack of subject knowledge and understanding of some phenomena. Materials used for ESP teaching are based on technical terms related to the professional field. However, there is a problem dealing with the word polysemy. Using of dictionaries and translator programs does not help to choose the appropriate definition or translation of the terms related to the field of Aeronautics. The illustrated dictionary for students of Airspace Systems Faculty was designed by the English teachers. It contains four hundred terms which are mostly used in authentic texts and it provides students with the most accurate definitions and Ukrainian equivalents of the terms related to Aeronautics.

Writing is an activity which comprises a wide array of student's knowledge and plays an important role in specialist training. Writing tasks are widely used both for practical and self-study work. They are closely related to the students' professional field and devoted to such useful aspects as CV writing, formal and informal letters and e-mails, agenda and memo writing. As students take an active part in Ukrainian and international conferences much attention is paid to abstract writing and style of writing.

**Conclusions.** Due to the needs of modern society, its globalization and mobility, students understand the importance of foreign language as a way to obtain better higher education and job opportunity, to become a member of the European community. English for Specific Purposes is a compulsory course that combined a lot of components to expand students' knowledge, improve their skills and foreign language competence, motivate learners and develop critical thinking and creativity. The issue of qualitative studying materials providing ESP course arises. To get success in designing ESP teaching and learning materials it is necessary to pay special attention to a number of factors such as needs and interests of students, their language proficiency, studying approaches and means, authenticity and novelty of subject-specific texts. The set of ESP materials developed for the field of Aeronautics meets all the requirements of teachers and learners. The textbook providing the practical training of students is based on communicative approach and contains the activities focused on developing skills in reading, listening, speaking and writing. The introduction of distant courses was successful solutions to organize students' self-work. The materials selected for distant course complement the topics of practical training and expand students' knowledge, increase their motivation in searching and processing additional profession-oriented information. This form of studying has the following advantages: despite the proficiency level, all students are engaged in the learning process, they can adapt their own pace of studying, the materials can be updated and improved, the work of students and the quality of their knowledge can be monitored.

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**С. В. Вадаська. Матеріали з іноземної мови професійного спрямування для студентів авіаційної галузі.** Вивчення іноземної мови є важливим фактором, який сприяє розширенню знань студентів, отриманню нового досвіду і дозволить у майбутньому успішно функціонувати в професійному середовищі. Той факт, що різні галузі потребують спеціалістів високої кваліфікації призвів до необхідності вивчення іноземної мови професійного спрямування у вищих навчальних закладах. Викладачі мають вирішувати низку питань, пов'язаних з навчальними програмами, матеріалами, рівнем знань студентів, засобами навчання тощо. Відповідальність за розробку навчальних матеріалів для іноземної мови професійного спрямування, укладання робочих програм, вибір відповідних засобів та підходів освітнього процесу полягає на викладача іноземної мови. Процес викладання та вивчення іноземної мови професійного спрямування має особливості, які треба приймати до уваги. Навчання зосереджується на отриманні студентами знань та навичок, які можуть бути використані для професійної діяльності майбутніх фахівців. Для того, щоб освітній процес відповідав вимогам викладачів та студентів, необхідно забезпечити його відповідними сучасними матеріалами. Питання відсутності навчальних посібників для студентів галузі Авіа- та Рaketobuduvannya була вирішена завдяки розробці необхідних матеріалів для забезпечення практичної та самостійної роботи студентів. Огляд укладених матеріалів для іноземної мови професійного спрямування для студентів Факультету авіаційних і космічних систем представлений в статті. Використання дистанційних курсів для організації самостійної роботи, особливості їх укладання та переваги такого виду навчання розглядаються в роботі.

**Ключові слова:** іноземна мова професійного спрямування; навчальні матеріали; дистанційні курси; термінологічний тренажер; самостійна робота; автентичність.

**С. В. Вадаская. Материалы по профессионально ориентированному английскому языку для студентов авиационной отрасли.** Поскольку все больше технических отраслей заинтересованы в квалифицированных и компетентных специалистах, возникает необходимость изучения профессионально ориентированного иностранного языка. Процесс преподавания и изучения в этом случае имеет свои особенности. Обучения сконцентрировано на получении студентами знаний и умений, которые они смогут успешно применить в своей профессиональной сфере. Вопросы, связанные с составлением учебных программ, наличием соответствующих обучающих материалов, организацией практической и самостоятельной работы студентов решаются преподавателями иностранного языка. В статье представлен обзор учебных материалов, разработанных для студентов в области Авиа- и Рaketostroyeniya и рассматриваются различные формы и средства обучения профессионально ориентированному английскому языку.

**Ключевые слова:** профессионально ориентированный иностранный язык; учебные материалы; дистанционные курсы; терминологический тренажер; самостоятельная работа; автентичность.