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THE INFLUENCE OF DISTANCE LEARNING OF AVIATION ENGLISH ON THE QUALITY OF KNOWLEDGE ACQUISITION BY STUDENTS OF AERONAUTICAL SPECIALTIES

ВПЛИВ ДИСТАНЦІЙНОГО ВИВЧЕННЯ АВІАЦІЙНОЇ АНГЛІЙСЬКОЇ МОВИ НА ЯКІСТЬ ЗАСВОЄННЯ НЕОБХІДНИХ ЗНАНЬ СТУДЕНТАМИ ЛЬОТНИХ СПЕЦІАЛЬНОСТЕЙ

The object of the study is the process of mastering aviation English by students using distance learning tools and considering the results of the analysis of linguistic and methodological foundations, existing regulations, modern standards and requirements for recommended methods and ways to improve the level of aviation English.

The purpose of the study is to improve the effectiveness of teaching aviation English through distance and online education.

Research methods – analysis of the methodological foundations and substantiation of recommendations for improving the effectiveness of teaching aviation English through distance and online education.

Modern learning environments pose challenges to all participants in the educational process: researchers, teachers, and students. Under the influence of the rapid development of information and communication technologies, more and more research and experiments are devoted to the problems and advantages of distance learning. The distance learning system is in the center of attention of modern trends. The change in the form of education has become a challenge for academic staff and students of higher education institutions, as previously distance learning was present in educational programs only as part of the curriculum of the discipline. Instead, it has now become a fundamental way to maintain the level of knowledge and further education.

Distance learning is gaining considerable popularity today due to simplified access to teaching materials, time savings, and transparency of the learning process. There are many advantages of both face-to-face and distance learning, but there is no doubt that distance education is recognized and its importance and demand is growing worldwide.

The paper proposes the analysis, development, substantiation and further implementation of scientific and methodological recommendations on the use of distance education for teaching aviation English at the university.

Key words: teaching; distance learning; higher education; methodology; aviation English.

Об'єктом дослідження є процес оволодіння студентами авіаційною англійською мовою з використанням засобів дистанційного навчання та з урахуванням результатів аналізу лінгвістичних та методичних засад, існуючих нормативних документів, сучасних стандартів та вимог до рекомендованих методів та шляхів підвищення рівня володіння авіаційною англійською мовою.

Мета дослідження – підвищити ефективність викладання авіаційної англійської мови засобами дистанційної та онлайн-освіти.

Методи дослідження – аналіз методологічних засад та обґрунтування рекомендацій щодо підвищення ефективності викладання авіаційної англійської мови засобами дистанційної та онлайн-освіти.

Сучасні умови навчання ставлять виклики перед усіма учасниками освітнього процесу: дослідниками, викладачами та студентами. Під впливом стрімкого розвитку інформаційно-комунікаційних технологій все більше досліджень та експериментів присвячується проблемам та перевагам дистанційного навчання. Система дистанційного навчання знаходиться в центрі уваги сучасних тенденцій. Зміна форми навчання стала викликом для науково-педагогічних працівників та студентів вищих навчальних закладів, адже раніше дистанційне навчання було присутнє в освітніх програмах лише як частина навчальної програми дисципліни. Натомість зараз воно стало основоположним способом підтримки рівня знань та підвищення кваліфікації.

Дистанційне навчання сьогодні набуває значної популярності завдяки спрощеному доступу до навчальних матеріалів, економії часу та прозорості навчального процесу. Існує багато переваг як очного, так і дистанційного навчання, але безсумнівним є те, що дистанційна освіта є визнаною, а її важливість та попит на неї зростає у всьому світі.

У статті пропонується аналіз, розробка, обґрунтування та подальше впровадження науково-методичних рекомендацій щодо використання дистанційної освіти для викладання авіаційної англійської мови в університеті.

Ключові слова: викладання; дистанційне навчання; вища освіта; методика; авіаційна англійська мова.

1. INTRODUCTION

Formulation of the problem. One of the directions of the process of informatization of society is the informatization of education. An effective means of solving this problem in the educational sector is the use of distance learning technologies. Given that academic education is an integral part of society, the introduction and widespread use of distance learning technologies in higher education institutions is one of the priorities of Ukrainian education.

The main goal of introducing, using and developing distance learning is to create conditions for providing high-quality modern educational services based on the use of information technology and in compliance with the basic principles of distance learning by all categories of users, regardless of their place of service or work, in accordance with state educational standards.

Distance learning of aviation English in the training of future specialists in flight specialties can be used in conditions where the possibilities of physical attendance are limited or non-existent, and traditional control and certification tools cannot be applied: official necessity; staying in the area of operations; natural disasters; quarantine measures and other circumstances).

Analysis of recent research and publication. As defined in the Order of the Ministry of Education and Science of Ukraine (MES) of 25.04.2013 No. 466 "On Approval of the Regulation on Distance Learning", registered with the Ministry of Justice of Ukraine on April 30, 2013 under No. 703/23235, distance learning is an individualized process of acquiring knowledge, skills, abilities and methods of human cognitive activity, which takes place mainly through the indirect interaction of remote participants in the educational process in a specialized environment that operates on the basis of modern psychological, pedagogical and information and communication technologies.

The aspect of distance learning for aviation students is relatively new for Ukraine. However, the use of the wide capabilities of modern technologies and a wide range of teaching methods will have a positive impact on the methodology and level of training of future specialists. Starting in the spring of 2019, educational institutions began to change the form of classes. However, such a forced step gave rise to new research and allowed scientists and educators to better understand the algorithms for working with various distance learning programs, as well as highlighted the challenges and benefits of working with them.

The concept of "distance learning" was first formulated by such scholars as M. Thompson, M. Moore, A. Clark, and D. Keegan. Each of these authors covered a separate aspect of this method. Thus, the main characteristics of distance learning include:

– the use of a much larger number of technical means and platforms than in the traditional form of education;

– separation of students and teachers in space, and sometimes even in time, because in addition to online classes, there is the use of pre-created audio and video recordings, textbooks, electronic forms, etc;

– relative accessibility and visibility of teaching materials, and free access to them;

– the ability to create interactive forms of training;

– the ability to individually regulate the pace of the scientific material.

Graham mentions three main reasons why it is worth introducing elements of distance learning into the educational process: it improves pedagogy; increases access to educational materials (flexibility); increases cost-effectiveness; etc.

The objective of this work is to determine the impact of distance learning of aviation English on the quality of mastering the necessary knowledge, skills and abilities by students of aeronautical specialties and to find ways to improve the efficiency of teaching aviation English through distance education.

2. RESEARCH RESULTS

Modern global trends in the spread of networked information technologies have opened up new prospects for the development of the educational process. The rational combination of such technologies with existing teaching methods has become the key to successful learning activities of both teachers and students. Today, almost all higher education institutions are actively developing and implementing distance learning. Distance learning of academic subjects is a special form of organizing the educational process based on the use of new information and communication technologies and ensuring effective interactive interaction between all participants in educational activities regardless of their location.

The purpose of distance learning in higher education, in particular at our university, is to provide students with the opportunity to independently work on educational material and receive the necessary consultations at a convenient time for them, regardless of their location. Distance

learning of aviation English is not a form of distance learning or a type of independent activity. It is built in accordance with the content and goals of full-time education. However, the way and specifics of presenting the learning material and the forms of interaction between the teacher and the students are significantly different due to the new capabilities of the information environment. Distance learning can be successfully applied to foreign language learning by students at any stage of their education.

It should be noted that distance learning of special subjects has its own characteristics. When developing a lesson plan, the teacher considers the methods and pedagogical techniques that need to be used to achieve the lesson goals.

In accordance with the regulations of the Ministry of Education and Science of Ukraine, the educational process in distance learning is carried out in the following forms: independent work, training sessions, practical training, control measures. To implement all these forms, various Internet resources, educational platforms, social networks, and video conferences (lectures or practical classes in real time) are used. Modern information technologies have a positive impact on the educational process and significantly expand the possibilities of learning, providing visual, demonstrative, easy-to-understand presentations. Students learn better and faster if the teaching methods used correspond to their preferred learning styles. With the advent of online education, the relationship between students and teachers can be radically changed, because students are involved in the learning process and become more interested and motivated in learning and increasing self-esteem. The use of modern information technologies can improve students' motivation to learn, their responsibility, level of self-realization, formation of communication skills and intercultural competence. It can motivate stronger students to help others and strengthen interaction between participants in the educational process. They can also provide them with a platform for discussing topics covered in the auditorium and outside the university.

Pedagogical methods and techniques used in distance learning can be classified as follows: learning methods through the interaction of the learner with educational resources with minimal participation of the teacher and students (self-study, asynchronous learning). The development of these methods is characterized by a multimedia approach, when educational resources are created using a variety of means:

– printed, audio, video materials and educational materials coming from computer networks;

– methods of individualized teaching and learning, which are characterized by the interaction of one student with one teacher or one student with another student ("one-to-one" learning). These methods are implemented in distance learning mainly using technologies such as telephone, e-mail.

Most of the practical lessons in aviation English during the quarantine were carried out using the methods of synchronous distance learning, which require participants in the educational process to be simultaneously present in the virtual environment of a cloud service or program. This is done by organizing a simultaneous meeting of training participants through various services for online communication (ZOOM, Skype, Microsoft Teams) in the format of a video conference, which has now become one of the modern methods of communication, allowing classes to be held in the so-called "remote classrooms", when those who study and the teacher are at a distance. Therefore, discussions and decision-making, debates, and project defenses take place in real time. One of the main tasks of the teachers was to develop a strategy for teaching aviation English in a distance format in order to make their practical classes based on online platforms as effective as during classes in the auditorium. Our university has had the Moodle educational platform for many years, which partially solves the problem, but it cannot meet the requirements of a communicative approach when teaching aviation English to future flight specialists. After discussing and evaluating the possibilities of existing distance learning tools, their advantages and disadvantages, a combination of two educational tools was chosen to conduct aviation English classes: Zoom (for video conferencing) and Moodle (for independent study and assessment).

The priority in teaching aviation English to prepare future aeronautical specialists for the ICAO standard exam should be speaking and listening exercises. This is both the specificity of the discipline and the main difficulty in teaching aviation English in a distance mode, especially in the process of developing speaking skills. Considering the large volume of lexical material that students at the university's flight faculty need to learn, teachers use such methodological techniques and lexical games in regular classes, which are aimed at increasing the efficiency of memorizing lexical units on the topic of the lesson. Analyzing the experience of conducting classes in the video conference mode, it should be

noted that some types of work with lexical material were no less effective than during classes in the classroom. For example, the teacher suggests that students write words in chat mode that they associate with the topic of the lesson, then give examples of sentences with these words. The teacher can also divide the cadets into groups (the advanced version of ZOOM has the Break-out rooms function, which allows this to be done), then the students make a list of the words they learned in the lesson (the time for completion is limited), compare their lists of words, and make sentences with them (this type of work can be organized as a competition between subgroups). The ZOOM educational platform has an annotation function that allows students to comment/write down their thoughts and ideas on a virtual whiteboard during brainstorming. This same function allows them to perform certain types of lexical exercises in the textbook they see on the screen (exercises on determining the correct answer, combining parts of a sentence, true/false, single or multiple choice of correct answers, matching definitions and answer options). One of the important skills of flight faculty students is describing a picture in English. This type of work is also quite possible during a class based on the ZOOM platform. Students, looking at the picture, take turns providing a description of the image. The project method also works well during online classes, when students, working together in smaller groups, reproduce their results on the screen. For senior students, it is advisable to perform and present part of the tasks in the form of presentations, since they can show and comment on them on a shared screen. When developing methodological techniques for distance learning in aviation English, it is important to remember that the effectiveness of any type of distance learning depends on four factors:

– effective interaction between the teacher and the student, despite the fact that they are separated by distance;

– pedagogical techniques used;

– effectiveness of methodological materials and ways of their delivery;

– effectiveness of feedback.

3. CONCLUSIONS

The effectiveness of distance learning in aviation English depends on the quality of the methodological content that accompanies it. Methodological materials for distance learning should be aimed at the independent development of foreign language communicative competence of those who study, the acquisition and training of all necessary linguistic skills, provide the necessary conditions for the assimilation of new language material with subsequent practical use, and encourage active creative search.

The role of the teacher is to help those who are learning aviation English, to stimulate them to independent reflections, discoveries, new views on the discipline of study. At the same time, the teacher and the student remain participants in this process in an active dialogue of attempts.

The teacher always uses combined methods, the choice of which depends on the pressing problems of the students. In our case, we are dealing with the influence of the professional environment in which students are from the first days of their studies at a higher educational institution. Such conditions of everyday life can be considered special and such that they require physical and psychological readiness for educational activities, as well as regulation of their own behavior, development of creativity along with adaptation to the fulfillment of requirements in the conditions of study at a higher educational institution.

Based on the results of the work, we will substantiate the main points of the methodological foundations of teaching aviation English using distance learning tools for aviation English, which must be taken into account when drawing up the work program of the aviation English academic discipline:

– the use of various distance learning methods when training future aviation English specialists will allow achieving a high level of competence in disciplines taught in English in order to guarantee flight safety on international air routes and during international exercises;

– the use of distance education platforms for teaching aviation English in a higher education institution is of high importance and requires academic staff to have an appropriate level of training, professionalism, and personal responsibility;

– the student must be sufficiently and personally interested and motivated in mastering aviation English using methods and means of distance learning of the subject;

– the relevance of the educational material must meet the requirements of distance learning for teaching aviation English and coincide with the real professional activities of the future aviation specialist;

– a positively minded scientific and pedagogical employee of the university must support students on the chosen path in acquiring knowledge, skills and abilities to be fluent in aviation English.

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