ЛОМАКІНА Лариса Володимирівна –
старший викладач кафедри
англійської мови технічного спрямування №1
Національного технічного університету України
«Київський політехнічний інститут імені Ігоря Сікорського»
ORCID: https://orcid.org/0000-0002-3449-8121
e-mail: llv85@ukr.net

ГУРАЛЬ Оксана Ігорівна –
викладач кафедри англійської мови технічного спрямування №1
Національного технічного університету України
«Київський політехнічний інститут імені Ігоря Сікорського»
ORCID: https://orcid.org/0000-0002-1552-2093
e-mail: guraloksana712@gmail.com

ДИЧКА Наталія Іванівна –
кандидат педагогічних наук,
доцент кафедри англійської мови технічного спрямування №1
Національного технічного університету України
«Київський політехнічний інститут імені Ігоря Сікорського»
ORCID: https://orcid.org/0000-0002-3363-569X
e-mail: dychka81@gmail.com

ЗАСТОСУВАННЯ ІКТ У СУЧАСНИХ УМОВАХ НАВЧАННЯ ІНОЗЕМНОЇ МОВИ МАЙБУТНІХ ІНЖЕНЕРІВ

У статті обґрунтовано актуальність застосування інформаційно-комунікаційних технологій (ІКТ) при навчанні майбутніх інженерів іноземної мови, фахових дисциплін в умовах карантину під час пандемії COVID-19. Здійснено аналіз наукових джерел у контексті застосування ІКТ в освіті. Однією із найскладніших та гострих педагогічних проблем іншомовної підготовки студентів інженерно-технічних закладів вищої освіти загалом є забезпечення індивідуалізації навчання і стимулювання мотивації студентів до саморозвитку. На думку авторів статті, можливим дієвим засобом вирішення цих проблем у дистанційній формі навчання є використання технології ведення навчальних блогів. Метою статті є висвітлення і аналіз організації освітнього процесу у сучасних умовах за допомогою освітніх ІКТ під час навчання іноземної мови і фахових дисциплін майбутніх інженерів, зокрема освітнього блогу та онлайн-вправ сервісу LearningApps. Висвітлено основні питання організації онлайн навчання іноземної мови студентів технічного профілю. Методика ведення блогу частково схожа з проектним методом і методом «портфоліо». З одного боку, навчальний блог доцільно розглядати як проект: його створення і регулярне наповнення вимагає прагматичної спрямованості на результат, який можна осмислити, застосувати в реальній практичній діяльності. У веденні блогу так само, як і в методі проектів, студенти залучені в діалог культур і мають можливість отримати зворотній зв'язок від професійних лінгвістів і носіїв іноземної мови на основі функції коментарів, вбудовану в блог-платформу. З іншого боку, навчальний блог виконує роль електронного «портфоліо» - засоби контролю та оцінки якості самостійної роботи студента і його прогресу у формуванні професійної іншомовної компетентності, що виявляються у порівнянні з першим та останнім записом у блозі. Блог є і специфічним звітом студента, в якому представлені результати аналізу англомовних матеріалів з професійної тематики. У статті проведене опитування майбутніх інженерів стосовно їх оцінювання сучасного викладання іноземної мови, фахових дисциплін у інженерно-технічних закладах освіти. Дослідження проводилось на факультеті електроніки у Національному технічному університеті України «Київський політехнічний інститут імені Ігоря Сікорського». До розгляду було запропоновано освітній процес у дистанційному режимі на основі онлайн заняття з використанням освітнього блогу, ментальних карт та інтерактивних вправ сервісу LearningApps. В ході дослідження було визначено недостатній рівень знань і практичних навичок студентів з іноземної мови. Виявлено недоліки професійної підготовки майбутніх інженерів під час вивчення іноземної мови та фахових дисциплін, зокрема традиційність підготовки та обмежене використання ІКТ у інженерно-технічних закладах освіти. Зроблено висновок, що використання ІКТ в освітньому процесі значно покращує якість та ефективність навчання, наближає студентів до реальних умов професійного середовища, дає змогу якісно вдосконалювати свої практичні навички. З огляду на результати проведеного дослідження можемо окреслити перспективи подальших досліджень впровадження вищевказаних ІКТ при вивченні навчальних дисциплін гуманітарної і природничо-наукової підготовки у сучасних умовах пандемії COVID-19 та воєнного стану в Україні.

Ключові слова: *організація освітнього процесу; навчання іноземної мови; інформаційно-комунікаційні технології; освітній блог; онлайн-вправи Learning Apps.*

LOMAKINA Larysa Volodymyrivna –
Senior Lecturer of the Department of English for Engineering №1,
National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
ORCID: https://orcid.org/0000-0002-3449-8121
e-mail: llv85@ukr.net

HURAL Oksana Ihorivna –
Lecturer at the Department of English for Engineering № 1, National technical university of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
ORCID: https://orcid.org/0000-0002-1552-2093

e-mail: guraloksana712@gmail.com
DYCHKA Natalia Ivanivna –
Candidate of Pedagogical Sciences, Associate Professor at the Department of English for Engineering № 1. National technical university of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
ORCID: https://orcid.org/0000-0002-3363-569X
e-mail: dychka81@gmail.com

ICT APPLICATION IN MODERN FOREIGN LANGUAGE TRAINING OF FUTURE ENGINEERS

The article justifies the relevance of the use of information and communication technologies (ICT) in a foreign language and professional disciplines teaching of future engineers in quarantine conditions during the COVID-19 pandemic. The analysis of scientific sources in the context of the use of ICT in education was carried out. One of the most difficult and acute pedagogical problems of foreign language training of students of technical universities in general is to ensure individualization of training and stimulation of students' motivation for self-development. According to the authors of the article, a possible effective means of solving these problems in distance learning is the use of educational blogging technology. The purpose of the article is to highlight and analyze the organization of the educational process in modern conditions with the help of educational ICT during a foreign language and professional disciplines teaching of future engineers, in particular, an educational blog and online exercises of the LearningApps service. The article highlights the main issues of organizing online foreign language teaching for technical students. The method of blogging is partially similar to the project method and the "portfolio" methods. On the one hand, an educational blog should be considered as a project: its creation and regular content requires a pragmatic focus on a result that can be comprehended and applied in real-life practice. In blogging, just like in the project method, students are engaged in a cultural dialogue and have the opportunity to receive feedback from professional linguists and native speakers based on the comment function built into the blog platform. On the other hand, an educational blog serves as an electronic "portfolio" - a means of monitoring and evaluating the quality of a student's independent work and his/her progress in developing professional foreign language competence, which are revealed by comparing the first and last blog post. The blog is also a specific student report, which presents the results of the analysis of English-language materials on professional topics. The article presents a survey of future engineers regarding their assessment of the modern teaching of foreign languages and professional disciplines in higher technical educational establishments. The study was conducted at the Faculty of Electronics at the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". A distance learning process based on online classes using an educational blog, mind maps and interactive exercises of the LearningApps service was proposed for consideration. In the course of the study, the insufficient level of students' knowledge and practical skills of a foreign language was determined. The shortcomings of the professional training of future engineers during the study of a foreign language and professional disciplines have been revealed, in particular, the traditional nature of training and the limited use of ICT. It is concluded that the use of ICT in the educational process significantly improves the quality and effectiveness of education, brings students closer to the real conditions of the professional environment, and allows them to qualitatively improve their practical skills. Taking into account the results of the study, it is possible to determine the prospects for further research on the implementation of the above ICT in the study of humanities and science disciplines in the current conditions of the COVID-19 pandemic and martial law in Ukraine.

Keywords: organization of the educational process; foreign language teaching; information and communication technologies; educational blog; online exercises Learning Apps.

Introduction. The primary task defined in the Concept for the Development of the Digital Economy and Society of Ukraine is to form a thorough national policy of digitalization of education as a priority component of the educational reform, one of the main directions of which is the development of distance education using cognitive and multimedia technologies. The development of modern education is now not keeping up with the world's daily advancing innovations. The essence of the problem is that the amount of new information is increasing every day, new theories are constantly emerging, views on a particular problem are changing, and the traditional study of new approaches and technologies in classrooms can no longer ensure the effective transformation of student's acquired scientific and technical knowledge, skills and abilities during their studies for their implementation in future professional activities.

With the introduction of a number of reforms in modern education, in the conditions of rapid innovative development of both Ukrainian education and society as a whole, the problem of training future engineers for professional activity has become more acute. In today's information society, future engineers need not only to have a sufficient supply of knowledge in fundamental and technical disciplines, but also to be creative and imaginative, able to quickly adapt to various life situations, independently acquire the necessary knowledge, skilfully apply it in practical activities, and build their future in a rapidly progressing information space.

While studying in technical higher educational establishments, a prerequisite is to train a future specialist who can make an independent decision in any difficult technical situation, with developed critical and creative thinking, with formed communication skills and the ability to work together in a team. Learning foreign languages in today's society is becoming an integral part of the professional growth of specialists in various fields. The successful resolution of professional training issues largely depends on the quality of their speech training. In order to successfully solve these problems, modern education should be based on the formation of skills of independence, cooperation, creative and critical thinking, responsibility, be as close as possible to the conditions of the real environment, and promote the development of reflection and self-evaluation.

All this requires the introduction of new pedagogical technologies. In early 2020, the higher education system faced a challenge related to COVID-19. Within a short period of time, all educational institutions switched to distance or mixed learning. Teachers have changed traditional principles and approaches to the organization of the educational process in the context of the pandemic. They improved and introduced new forms, methods and technologies of teaching. The success of training largely depends on the teaching methodology of the teacher, his ability to use various innovative methods and techniques in teaching. Under such circumstances, the problem of choosing the most effective innovative methods and technologies in the modern system of higher professional education remains significant and relevant.

It was in this difficult period for everyone to organize the educational process during the quarantine that special attention was paid to Internet technologies, which organically fit into the structure of distance and mixed learning of students of technical specialties during the teaching and learning of theoretical and practical blocks of academic disciplines.

Research publications analysis. The analysis of scientific developments shows that the problems of using Internet technologies are reflected in the works of many scholars. For example, V. Bykov, R. Hurevych, M. Kademiia, M. Koziar, M. Zhaldak, O. Mukoviz, K. Kolos, N. Kolomiiets in their studies emphasize the need to introduce ICTs into the educational process of higher education institutions. V. Yu. Bykov notes that "among modern educational technologies that appeared at the end of the twentieth century and are now noticeably widespread in developed countries, are distance learning technologies that support and provide distance education (DL) [1]. To the main advantages of distance learning O. P. Mukoviz, K. R. Kolos and N. A. Kolomiiets include: automatic and timely updating of versions of the required software and electronic educational resources (EER), secure protection against unauthorized access, the possibility of simultaneous access of several users to educational resources and the ability to use resources anywhere or anytime [2]. The use of blogs in the learning process is considered in the studies of domestic and foreign scientists. In the context of our research, the scientific works of O. Naboka and M. Demchenko deserve special attention. Scientists conducted a detailed analysis of the definitions of "blog", "educational blog", proposed their definition of "educational blog" and identified typical errors that may occur when creating it [3, p. 64]. L. Matohnyuk [4] and K. Demyanyuk [4] in their writings identified the main advantages of blogs compared to other electronic resources and noted their ease of use and accessibility; efficiency of information space organization; interactivity and multimedia; reliability and safety. The works of S. Kizim [5] and T. Tarnavska [6] are interesting for our research. Scientists determine the significant role of educational blogs in increasing students' motivation to learn. S. Kizim emphasizes that "the joint work of the teacher and students forms the ability of future specialists to store and carry out search, analysis, as well as to determine the quality of educational blogs on the Internet, to use Web technologies to ensure educational goals and self-education" [5, p. 279]. The experience of using blog technologies in the educational process is presented in the publications of foreign scientists Z. Amir, H. Du, S. C. Herring, V. Dennen, M. Thomas, O. Halic and others. V. Dennen [7] divides participants of blog communication into groups: 1) bloggers; 2) active commenters; 3) lurkers; 4) passers-by; 5) characters. Z. Amir [8], O. Halic [9], M. Thomas [10] and others consider the introduction of blogs to be extremely necessary and highlight learning potential as the main component of educational blogs.

LearningApps interactive online exercises, which are also internet technologies offered for implementation in the educational process, are considered in our research. The possibilities of applying these innovations in the educational process are discussed in the studies of our scientists. In the course of the analysis of O. Voloshyna's works, it was established that the gallery of the aforementioned service contains more than 30 types of interactive exercise templates [11, p. 53]. Moreover, the scientist states the fact that such variability allows you to create exercises for learning new material, as well as for consolidating and improving the acquired knowledge, skills and abilities. O. Ilyina and I. Shahina highlighted the positive qualities of this service, in particular, the lack of payment; the possibility of exchanging interactive tasks; the ability to create and edit tasks online using various templates; multimedia; instant verification of the correctness of the task" [12, p. 156]. Along with the positive qualities, scholars also distinguish the negative qualities of the service: "some of the templates do not support Cyrillic alphabet; an Internet connection is required; some exercise patterns are modified or retrieved from the site "[12, p. 156]. In her revisions, M. Sablina divides the online exercises of the interactive educational environment LearningApps.org into categories: "by subject, level of education and ready-made templates that can be used or created individually" [13, p. 290]. R. Horbatyuk and U. Dudka believe that by performing interactive exercises of the above-mentioned service, "students generalize and deepen their knowledge, develop attention and memory, develop critical and algorithmic thinking skills" [14, p. 51]. Despite the interest of scientists in the aspect of using Internet technologies as the main ones among a number of modern ICTs, the problem of their introduction into the educational process of technical universities, in our opinion, requires more attention. The issue of their use in the professional training of future engineers in a foreign language and professional learning remains insufficiently studied.

The purpose of the article. In view of the outlined problem, the purpose of the study is to highlight and analyze the use of the technological component of ICT-based teaching systems in the educational process, and in particular, the educational blog and online exercises of the LearningApps service of the disciplines " Practical foreign language course", "Practical foreign language course for professional communication", "Practical course of a foreign language for business communication" in the training of future engineers.

Research methods. The following research methods were used in the study: the method of theoretical analysis of educational documents and scientific-methodological works on problematic issues of pedagogy teaching methods; synthesis of educational and methodological ideas; generalization of own pedagogical experience; methods of generalization and comparison of theoretical data with the help of which it is possible to show the practical application of innovative ICT; students' survey on the effectiveness of using the above-mentioned innovations in a foreign language and professional training of future engineers.

The scientific novelty of the obtained results lies in the improvement of the content, forms, methods, tools and technologies of teaching a foreign language and professional disciplines by introducing professionally oriented blogs, mind maps and online exercises of the LearningApps service into the educational process of technical universities.

Presenting the main research material. During the analysis of scientific sources covering the problems of ICT application in educational institutions, it was found that scientists identify the need to use these learning technologies and consider their use as the most important way to improve the educational process which is aimed at improving the quality of personal learning, developing students' intellectual potential and forming the skills to independently acquire knowledge.

At the state level, the issue of ICT introduction in education is reflected in the "Concept of Digital Transformation of Education and Science for the period up to 2026", which represents a comprehensive systemic strategic vision of the digital transformation of these spheres and meets the principles of implementation by executive authorities of the principles of the state policy of digital development, which was approved by the Resolution of the Cabinet of Ministers of Ukraine dated January 30, 2019 No. 56. Also, much attention is focused on the use of ICT and on the significant role of information and communication competence among the key competencies in the context of comprehensive secondary education in the State Standard of Basic and Complete General Secondary Education. According to the content of this document, teachers of various educational disciplines need to introduce ICT into the educational process, in particular, into philological and technical education and to teach students of technical specialties to use these innovations in their future professional activities. Unfortunately, in most cases, the use of modern Internet resources in the students' independent work of technical universities is limited to searching for materials on the Internet or writing essays and creating presentations. At the same time, little attention is paid to mastering the tools of innovative Internet technologies. At present, in a time of advances in information technology, modern specialists should not only possess professional competence, but also be free to use the computer and use ICT in their professional activities. It's no secret that future engineers are dependent on the computer; they mostly read technical documentation online and often communicate with colleagues via the Internet. Therefore, information and computer literacy and professional abilities of a technical specialist are important priorities during employment. Computer literacy is taught to the students of technical universities at the beginning of their studies. When studying professional disciplines in undergraduate courses, students increase the level of knowledge gained in technical computer science.

A survey of undergraduate students was conducted. According to students, the possibility of using ICT in the teacher's creation of means of organizing the educational process is limited to the use of presentations and interactive whiteboards in classes. In the context of programs, the most commonly mentioned are Microsoft Office applications, social networks (mainly Facebook), Skype, and Viber, which are used for communication and information exchange. Most of the surveyed students (90%) have heard about the possibility of using educational blogs during their training, and less than 10% of them know about LearningApps.org online exercises. This once again proves the need to introduce the above-mentioned technologies into the educational process. Students were also offered a survey on modern teaching of foreign languages and professional disciplines. In their answers (45%), students repeatedly mentioned that there is a lack of use of ICT when teaching these subjects. At the time of computerization of all branches of everyday life, future engineers cannot see life without gadgets.

Also, often in their answers, the main shortcomings of teaching were indicated by students as "insufficient demonstration of real thematic tasks" (39%), "standard conducting of practical classes" (61%), "infrequent attendance of practical classes" (57%). In their opinion, it would be very convenient to "upload" textbooks in professional disciplines (15%) or videos of performing basic practical skills to a smartphone or tablet and independently prepare for a discipline lesson, for example, during a home trip (13%).

The level of use of ICT by teachers was assessed by 30% of students as high, 50% - as sufficient, and 20% - as insufficient. The entrance test in a foreign language revealed a low level of students' knowledge, similar to that in professional disciplines. One of the most difficult and acute pedagogical problems of foreign language training of students of technical higher educational establishments in general is the provision of individualization of training and stimulation of students' motivation for self-development.

Therefore, the use of only traditional methods in the training of future engineers is not sufficient for forming a high level of readiness for their professional activities. All of the above predetermines the need to make changes with the use of other methods and approaches, including the introduction of innovative ICTs.

According to the authors of the article, a possible effective means of solving these problems in distance learning is the use of educational blogging technology. The method of blogging is partly similar to the project method and "portfolio" method. On the one hand, an educational blog should be viewed as a project: its creation and regular content requires a pragmatic focus on the result, which can be considered and applied in real-life practice. In blogging as well as in the method of projects, students are engaged in cultural dialogue and have the opportunity to receive feedback from professional linguists and foreign speakers based on the commentary function built into the blog platform. On the other hand, a learning blog serves as an electronic "portfolio" - a means of monitoring and evaluating the quality of a student's independent work and his/her progress in developing professional foreign language competence, which are revealed in comparison with the first and last blog post. The blog is a specific student report that presents the results of an analysis of English-language materials on professional topics. At the same time, the availability of the blog on the Internet can help employers assess a graduate's ability to solve professional tasks that require knowledge of a foreign language.

The analysis of the approaches presented above made it possible to demonstrate our own experience of implementing these innovations when teaching a professionally oriented foreign language. We have proposed for consideration the structure of an educational blog on teaching a foreign language intended for future engineers.

The content of the educational blog, in our opinion, should contain several important components. On the main page, we post an informative feed on which the organizational information necessary for students while studying the discipline is constantly updated. This page also contains the content of the teacher's main methodological work in the discipline of the corresponding profile, including electronic manuals "Students' Manuals for Speaking and Reading Skills Development of Technical English for Physical and Biomedical Electronics", "Workshop on Foreign Language Scientific Communication. Collection of Test Tasks", "Acoustician and Scientific Society: Communicating in English", thematic training videos, mental maps that structure the entire course of the discipline (test tasks, game exercises, situational tasks, practical skills algorithms), presentations on each topic, a workbook scheme and basic information about the blog author. In addition to methodological materials posted on

the website, it is advisable to offer offline communication on the student-teacher forum. So, with the help of developing a personal blog, the teacher summarizes and presents his pedagogical experience, archives practically significant material and expands cooperation. Let's take a closer look at some of the blog's components. In our opinion, an interesting online technology is the creation of electronic training tutorials, which are posted on the blog. The e-tutorials are presented in the format of mind maps and contain up-to-date teaching and learning material on the above-mentioned disciplines. The content of electronic textbooks should be divided into main topics, which allows students not only to familiarize themselves with the basic information of the foreign language course, but also to trace the interrelationship of all the topics. Theoretical material should be presented clearly and concisely. The most significant points from each topic are highlighted, for which you need to select appropriate video plots. Each video resource can be accessed by clicking on the specified link.

The blog structure contains mind maps of the Mindomo service. Different structures of mind maps can be presented in the blog (with structural and schematic content of all practical tasks in the academic discipline and algorithms of practical skills that students must learn and perform correctly; with structural and schematic content of all the proposed exercises of the LearningApps online service according to each topic from the academic discipline).

To complement the mind maps, we suggest creating a set of game exercises from the online service LearningApps.org. Each of them has a task of connecting correctly matched pairs called "Find a Pair". Students are asked to watch a video or listen to an audio plot and then match it to one of the suggested responses. Correctly matched pairs disappear from the screen. Incorrectly matched pairs remain on the screen. The exercise will not end until the student corrects the mistakes and all the pairs disappear from the screen. Another variant of the proposed tasks could be solving a crossword puzzle on the relevant topic. Students need to answer the questions and find the right answer, which is encrypted in a crossword puzzle, and highlight it. If the answer is selected correctly, the computer automatically fills in the blanks in green on the right side of the screen. The exercise ends only after all empty cells have been filled.

Another option for interactive exercises is to complete the main stages of the practical skills algorithm in the correct sequence. The student has to fill in the gaps. Several answers are displayed on the screen, among which only one answer is correct. When the exercise is over, incorrect answers are marked in red on the screen. The student will not be able to complete the task until all errors are corrected.

Teaching educational and practical information with the help of modern Internet technologies allows the teacher to quickly change it in accordance with new scientific achievements. Also, making the specified changes does not require financial costs, as in the case of using paper teaching aids. The introduction of these innovative ICTs into the educational process allows students to use electronic educational resources in any convenient place. Nowadays, almost all students have a mobile Internet connection, so there is no need to be tied to a computer classroom. Also, thanks to the introduction of innovative ICTs, students have access to a large amount of information in accordance with the content of their specialty discipline.

The study included a survey of undergraduate students and teachers of foreign languages and professional disciplines in order to determine the level of use of modern Internet technologies during the learning of specialized disciplines. It was found that 75% of the surveyed students prefer conducting classes with the combined use of innovative ICT, namely blogs, mind maps and LearningApps online exercises in combination with traditional teaching methods and tools. 15% of respondents believe that traditional teaching methods and means can be replaced by Internet technologies without losing the quality of education. Among teachers, 83% of respondents also prioritize the implementation of the above-mentioned combination, including blogs, mind maps, and LearningApps online exercises in a complex with traditional teaching methods and tools. Among them, 12% determine that innovative ICTs have the right to exist, however, the quality of education during their use may decrease slightly compared to traditional methods. In their responses, students mentioned the advantages of learning a foreign language and professional disciplines with the use of innovative ICT: "rational use of time" (40%), "convenient form of online control" (12%), "simplicity and accessibility" (10%), "game form of conducting classes" (5%), innovative ICTs increase emotional state and self-confidence when studying a discipline (17%), and no need to be tied to the computer class (12%). In the survey of foreign language and professional disciplines teachers, it was emphasized that online tools during classes immerse students in a game atmosphere similar to the atmosphere of leisure and entertainment (19% of respondents), and "rational use of time" was also frequently mentioned (75% of respondents). Another advantage of using innovative ICTs, namely the impossibility of prompting and copying (44%), was repeatedly mentioned in the teachers' answers.

Therefore, when conducting any knowledge control with the use of blogs, mind maps and LearningApps exercises, the objectivity of the assessment increases. The teacher cannot increase or decrease the student's score, because the rating is "transparent" and the computer gives the "marks".

Conclusions and further research prospects. Thus, taking into account the outlined problem, the analysis made it possible to consider the main principles of using ICT in modern education. It has been determined that the use of educational blogs, mind maps, and interactive LearningApps exercises can develop the cognitive activity of future engineers, form their basic professional qualities, and ensure students' gradual transition from academic to professional activities. In the course of the study, the aim was to acquaint educators with developments in the creation of web-based teaching methods, as well as to recommend the use of the proposed methodology as an example for teaching other academic disciplines at technical universities. Taking into account the results of the survey, the students came to the conclusion that the use of ICT is popular and appropriate, especially during the distance or mixed format of education in quarantine conditions. It would also be interesting for them to learn other disciplines using this teaching method. The methods of introducing of the above-mentioned online technologies have now become the most relevant, necessary and are in great demand in difficult conditions of the development of modern education. We believe that the use of the proposed Internet technologies contributes to the improvement of the quality and efficiency of professional training in higher technical educational establishments. Summarizing the

above, we can outline the prospects for further research on the implementation of the above-mentioned ICTs in the study of educational disciplines of humanitarian and natural science training in modern higher education institutions.

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ВІДОМОСТІ ПРО АВТОРІВ

ЛОМАКІНА Лариса Володимирівна – старший викладач кафедри англійської мови технічного спрямування №1 Національного технічного університету України «Київський політехнічний інститут імені Ігоря Сікорського».
Наукові інтереси: інформаційно-комунікаційні технології в освіті, методи навчання іноземних мов на нелінгвістичних факультетах.

ГУРАЛЬ Оксана Ігорівна – викладач кафедри англійської мови технічного спрямування №1 Національного технічного університету України «Київський політехнічний інститут імені Ігоря Сікорського»
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ДИЧКА Наталія Іванівна – кандидат педагогічних наук, доцент Кафедри англійської мови технічного спрямування №1 Національного технічного університету

України «Київський політехнічний інститут імені Ігоря Сікорського»

Наукові інтереси: інформаційно-комунікаційні технології в освіті, методи навчання іноземних мов на нелінгвістичних факультетах.

INFORMATION ABOUT THE AUTHORS
LOMAKINA Larysa Volodymyrivna – Senior Lecturer of the Department of English for Engineering №1 of National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute".

Scientific interests: information and communication technologies in education; methods of foreign language teaching at the non-linguistic faculties.

HURAL Oksana Ihorivna – Lecturer at the Department of

English for Engineering № 1 of National technical university of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

Scientific interests: information and communication technologies in education; methods of foreign language teaching at the non-linguistic faculties.

DYCHKA Natalia Ivanivna – Candidate of Pedagogical Sciences, Associate Professor at the Department of English for Engineering № 1 of National technical university of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

Scientific interests: information and communication technologies in education; methods of foreign language teaching at the non-linguistic faculties.

ЛЯШЕНКО Ольга Дмитрівна –
кандидат педагогічних наук, доцент, доцент кафедри інструментально-виконавської майстерності Київського університету імені Бориса Грінченка
ORCID: https://orcid.org/0000-0002-5840-8178
e-mail: o.liashenko@kubg.edu.ua

ФОРМУВАННЯ У СТУДЕНТІВ-ІНСТРУМЕНТАЛІСТІВ ДОСВІДУ ПРОФЕСІЙНОЇ ДІЯЛЬНОСТІ В ПРОЦЕСІ ФАХОВОЇ ПІДГОТОВКИ В УНІВЕРСИТЕТІ

Статтю присвячено проблемі формування у студентів-інструменталістів досвіду професійної діяльності в процесі фахового навчання в університеті. Проаналізовано погляди науковців щодо сутності понять «досвід» та «професійний досвід» у філософському, психологічному, соціолого-педагогічному, музично-виконавському аспектах. Визначено специфіку діяльності музиканта-інструменталіста (як виконавця й педагога) та вимоги освітньо-професійної програми щодо фахової підготовки студентів-інструменталістів в університеті. Окреслено напрямки (виконавський та педагогічний) формування у студентів досвіду професійної діяльності. Охарактеризовано етапи формування практичного виконавського досвіду майбутнього інструменталіста та зміст фахової підготовки учнів і студентів в інструментально-виконавських класах. Обґрунтовано значення індивідуальної, ансамблевої та оркестрової підготовки студентів у формуванні досвіду професійної діяльності інструменталіста. Зосереджено увагу на комплексному характері формування педагогічного досвіду студентів-інструменталістів на заняттях з фахових дисциплін. Розкрито завдання концертно-виконавської та педагогічної практик у формуванні професійного досвіду студентів. Формування у майбутніх інструменталістів досвіду професійної діяльності визначено як процес фахової підготовки студентів у системі навчальних занять з інструментально-виконавських, історико-теоретичних і методичних дисциплін, концертно-виконавської і педагогічної практик та результат, який характеризує рівень готовності студентів до професійної діяльності. Сформульовано висновки: 1) досвід є невід'ємною складовою професійної компетентності фахівця, а його формування є тривалим поетапним процесом; 2) професійний досвід музиканта-інструменталіста є емпіричним знанням про способи концертно-виконавської та музично-педагогічної діяльності; 3) формування у студентів-інструменталістів досвіду професійної діяльності здійснюється в процесі фахового навчання, збагачується й удосконалюється протягом багаторічної творчої діяльності.

Ключові слова: *студент-інструменталіст, фахова підготовка, інструментальне виконавство, професійна діяльність інструменталіста, виконавський досвід, педагогічний досвід, формування професійного досвіду.*

LIASHENKO Olga Dmytrivna –
Candidate of Pedagogical Sciences, Associate Professor, Associate Professor of Department of Instrumental Performance Skills at Borys Grinchenko Kyiv University
ORCID: https://orcid.org/ 0000-0002-5840-8178
e-mail: o.liashenko@kubg.edu.ua

FORMATION OF STUDENTS-INSTRUMENTALIST EXPERIENCE OF PROFESSIONAL ACTIVITY IN THE PROCESS OF VOCATIONAL TRAINING AT THE UNIVERSITY

The article is devoted to the problem of forming students-instrumentalists experience of professional activity in the process of vocational training at the university. The views of scientists regarding the essence of the concepts of «experience» and «professional experience» in philosophical, psychological, socio-pedagogical, musical-performance aspects are analyzed. The specificity of the musician-instrumentalist activity (as a performer and teacher) and the requirements of the educational and professional program for the professional training of students-instrumentalists at the university are determined. The directions (performing and pedagogical) of forming students' experience of professional activity are determined. The stages of formation of practical performing experience of a future instrumentalist and the content of professional training of pupils and students in instrumental-performance classes are characterized. The importance of individual, ensemble and orchestral training of students in the formation of the experience of professional activity of an instrumentalist is substantiated. Attention is focused on the complex nature of the formation of pedagogical experience of instrumental students in the classes of professional disciplines. The tasks of concert performance and pedagogical practice in the formation of professional experience of students are revealed. The formation of future instrumentalists' experience of professional activity is defined as a process of students' professional training in the system of classes on instrumental-performance, historical-theoretical and methodical disciplines, concert-performance and teaching practice, as well as the