## CHALLENGES AND OPPORTUNITIES IN ESP TEACHING THROUGH DISTANCE LEARNING TECHNOLOGIES

# ВИКЛИКИ ТА МОЖЛИВОСТІ В НАВЧАННІ ФАХОВОЇ АНГЛІЙСЬКОЇ МОВИ ЗА ДОПОМОГОЮ ТЕХНОЛОГІЙ ДИСТАНЦІЙНОГО НАВЧАННЯ

The paper deals with distance learning technologies and their role in enhancing ESP teaching in Ukrainian universities. Higher education is currently witnessing the transformation of conventional learning since students and instructors use the potential of distance learning technologies capable of breaking down geographical barriers and providing new opportunities for learning. This transformation is particularly evident in ESP learning which has expanded beyond the borders of traditional classroom settings.

The paper explores how modern digital technologies including online platforms, e-textbooks, and other interactive resources, facilitate the delivery of high-quality education to students. It also investigates the methods of monitoring students' performance and assessing their academic progress.

The main challenges of implementing distance learning of the ESP course include technical problems, lack of face-to-face interaction, maintaining the willingness to learn in a remote environment and organizing objective assessments. Effective implementation of distance learning of the ESP course requires the need to adapt curricula and educational programs to this new form of study as well as the methods for monitoring students' performance and assessing their progress, taking into account the unique characteristics of this format of learning. The development of educational and methodological complexes not only facilitates the acquisition of practical approaches and comprehensive expertise but also gives priority to the development of practical skills and the development of future professionals.

Despite the persistent challenges, the benefits of global accessibility of distance learning, its mobility and flexibility, convenient learning options, personalized learning experience, diversity and multimodality of learning materials are very convincing. The implementation of distance learning offers promising prospects for full involvement in learning and increases teaching effectiveness. Today it is in a high demand for ESP learning with a significant potential for further development.

**Key words:** distance learning, digital technologies, online learning, ESP, online platform, feedback.

У статті розглядаються технології дистанційного навчання та їх вплив на покращення викладання та вивчення фахової англійської мови в українських ЗВО. Сьогодні у вищій освіті спостерігаються зміни традиційного навчального процесу, оскільки викладачі та здобувачі вищої освіти використовують потенціал дистанційного навчання, здатного подолати географічні бар'єри та надати нові можливості для навчання. Ці трансформації особливо помітні в організації навчання фахової англійської мови, яке вже вийшло за межі традиційного навчання в аудиторіях.

У статті досліджується, як сучасні цифрові технології, включаючи онлайн платформи, електронні підручники та інші інтерактивні ресурси, сприяють забезпеченню високоякісної освіти. Також вивчаються методи контролю та оцінювання академічної успішності здобувачів вищої освіти.

Стаття розкриває переваги та проблеми дистанційного навчання, пропонуючи аналіз його впливу на здобувачів вищої освіти, викладачів та систему вищої освіти в цілому. Основні проблеми організації дистанційного навчання фахової англійської мови — це технічні проблеми, відсутність особистого контакту, збереження мотивації та тривалого бажання навчатися у віддаленому середовищі та організація об'єктивного оцінювання.

Ефективна реалізація дистанційного навчання фахової англійської мови вимагає адаптації навчальних планів і робочих програм для цієї форми навчання. Також необхідно розробити навчально-методичні комплекси та ресурси, які не лише сприяють отриманню комплексного обсягу професійних знань, але й надають пріоритет розвитку практичних навичок і розвитку основних особистих якостей, необхідних майбутнім професіоналам.

Запровадження технологій дистанційного навчання розширює доступність високоякісної освіти для всіх охочих, у тому числі для людей з обмеженими фізичними можливостями, тих, хто перебуває далеко від ЗВО або зайнятий роботою, а також підвищують ефективність навчального процесу. Технології дистанційного навчання є потужним інструментом для забезпечення доступу до якісної освіти та підвищення рівня знань. Сьогодні вони користуються великим попитом при вивченні фахової англійської мови, маючи значний потенціал для свого подальшого розвитку.

Ключові слова: дистанційне навчання, цифрові технології, онлайн-навчання, фахова англійська мова, онлайн-платформа, зворотний зв'язок.

УДК 378.147:372.881.111.1 DOI https://doi.org/10.32782/2663-6085/2023/64.2.36

#### Konoplianyk L.M.,

PhD, Associate Professor, Associate Professor at the Department of Foreign Languages and Translation National Aviation University

#### Pryshupa Yu.Yu.,

PhD, Associate Professor, Associate Professor at the Department of Foreign Languages and Translation National Aviation University

#### Kovalenko O.O.,

Lecturer at the Department of English for Engineering  $\ensuremath{\mathbb{N}}_2$ 

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

**Problem statement.** In the age of globalization, the importance of mastering English is undoubtful. The acquisition of proficiency in ESP (English for Specific Purposes) is not merely an academic pursuit; it is a vital skill that broadens the horizons, offers new international opportunities, fosters cross-cultural communication, and enhances employability [3, p. 131]. As Ukrainian universities adapt to the demands of the

21st century, the integration of technology into the educational process has become a transformative force, revolutionizing the processes of teaching and learning. One of the manifestations of this change is the implementation of distance learning technologies in ESP teaching. Therefore, the organization of distance learning still remains a relevant topic for Ukrainian universities. Due to the rapid development

of information technologies and the emergence of new forms of study, new opportunities are opening up for students and university instructors. Distance learning is a convenient and effective way of obtaining knowledge, which allows students to acquire it at any location and at any time [13, p. 116].

One of the main aspects of organizing this form of study is technical support. Ukrainian universities apply significant efforts to develop technical infrastructure to ensure the efficient functioning of remote platforms and provide access to the necessary equipment and software. In addition, a lot of universities organize access to electronic libraries and other resources for independent learning [8, p. 22].

Another important aspect is the development and implementation of new online distance courses that would meet the requirements of modern higher education and ensure a high quality of education, which is one of the directions of active work of Ukrainian universities to improve the educational process. These courses are often interactive in nature, allowing students to interact productively with instructors and other students. An important component of the effective organization of distance learning and online learning is the appropriate training of university instructors. They must be able to use digital technologies effectively, create and teach online courses, monitor and assess students' performance and give them feedback or assistance. Therefore, the support and training of university instructors is one of the priorities of modern Ukrainian universities [9, p. 65].

One of the challenges in implementing distance learning is ensuring the quality of education, monitoring students' performance, and assessing their progress. Various forms of assessment (e.g., online tests, home assignments, written assignments, etc.) are used for this purpose. Another important component is providing access to information about students and their academic achievements [21].

Review and analysis of recent research and publications. Distance learning has its advantages and disadvantages. It allows students to study at their convenience and from any location, which is especially important for those individuals who work or are engaged in other activities. However, this form of study may be less effective for those who require more interaction with instructors and other students.

The integration of distance learning technologies into ESP teaching facilitates the development of innovative learning methods, enhances the accessibility of essential resources, and provides a more seamless learning experience for students. However, it is important to pay attention to the drawbacks of this form of study and systematically improve the technical infrastructure and methodology to ensure the ability to control and assess students' knowledge [10, p. 80].

Ukrainian researchers A. Oleksiienko, L. Kotendzhy, Y. Kyrylova, V. Kaminskyi and O. Viesova [1] make an investigation into the organization of distance learning in Ukrainian universities highlighting the effective organization of learning by means of modern technologies, in particular, the use of electronic textbooks and interactive teaching methods. O. Oseredchuk [14] examines methods of monitoring students' academic performance and focuses on the issue of the effectiveness of online testing. M. Sherman, E. Puhovskyi, Y. Kambalova and I. Kdyrova [2] reveal the issue of further development of distance learning in Ukraine. They consider the prospects and the main vectors of the introduction of distance educational technologies. O. Bashmanivskyi and K. Yarynovska [4] study the issue of students' motivation during distance learning. The authors list the main methods that help students adapt to a new educational environment.

Highlighting previously unresolved aspects within the overall problem. Although the identified advantages and disadvantages of integrating this form of study have been revealed, the scientific studies devoted to this issue have only reflected the initial outcomes of its implementation. Therefore, an analysis of the dynamics and effectiveness of implementing distance learning of ESP in Ukrainian universities requires further investigation.

The development of methods for monitoring students' performance and assessing their progress in a new educational environment, as well as the provision of effective interaction between instructors and students are still unresolved. Further investigation into this issue will contribute to enhancing the quality of ESP learning in Ukrainian universities with the use of online technologies.

The **objective** of the paper is to consider the issues related to the organization of distance learning of ESP in universities in Ukraine and to explore the innovative strategies, methodologies, and tools that have been adopted to enhance ESP learning through distance learning technologies.

Main part. The necessity of implementing digital online technologies in the educational process of Ukrainian universities has arisen from the need to improve the quality of education and provide access to education for all students irrespective of their geographical location. Initially triggered by the COVID-19 pandemic and subsequently exacerbated by the war, traditional classes in universities were constrained, requiring the adoption of distance learning as an additional opportunity to sustain an uninterrupted educational process.

However, its effective implementation requires not only technological equipment and software but also highly qualified university instructors proficient in digital technologies, capable of teaching their courses effectively through online resources. In addition, it is

## ІННОВАЦІЙНА ПЕДАГОГІКА

important to take into account students' needs, their English language proficiency, individual interests, and age group attributes [16].

For successful distance learning integration, it is necessary to guarantee the quality of the learning materials provided to students and their accessibility. For this purpose, a variety of platforms can be used for hosting video lessons, conducting online conferences and webinars, etc. Additionally, online forums, chats, and messengers can be used to organize interactive engagement between students and instructors, fostering question-and-answer exchanges in a real-time mode.

One of the key components of distance learning is the effective use of online resources. For instance, e-textbooks give students access to up-to-date information relevant to their field of study. Dedicated e-learning platforms and websites allow students to navigate the course materials on their own and receive an assessment of their assignment outcomes.

E-textbooks are one of the most convenient and efficient resources for distance learning of ESP. Their advantage over conventional paper textbooks is instant access to current and updated information, enabling students to engage in distance learning from any location and at any time.

Another significant advantage of e-textbooks is the availability of multimodal resources of diverse formats, including audio, video, interactive exercises and testing, enhancing students' comprehension and memorization of the learning material. Furthermore, electronic resources contribute to cost savings, preserve natural resources, and are environmentally efficient, as they do not require paper and other materials for their production [11].

E-textbooks for ESP are becoming increasingly prevalent in Ukrainian universities. They contribute to the enhancement of the quality of ESP learning and offer students a more accessible and improved learning experience. Nonetheless, it remains crucial to ensure the consistent and high-quality functioning of the essential technical means required for their use as well as to develop effective strategies for teaching,

monitoring students' performance and assessing their achievements in order to attain significant outcomes in this domain. Moreover, to ensure equal learning conditions for all students, it is important to take into account their individual characteristics, access to the Internet and technology [15, p. 65].

In order to use e-textbooks effectively while learning ESP, both instructors and students must possess the appropriate skills to work with them. Instructors should acquire proficiency in designing compelling and engaging e-textbooks in various formats by using available interactive tools. Students should have access to the required hardware and software. Table 1 summarizes the advantages and disadvantages of the integration of e-textbooks into ESP learning.

Moreover, the work with e-textbooks increased communication between instructors and students through platforms such as forums, chats, video conferencing, and other tools for addressing questions and providing assistance.

Given these advantages and disadvantages, ESP instructors have the opportunity to select the most suitable approach for integrating e-textbooks into ESP teaching. Depending on students' individual characteristics and instructors' proficiency in working with these resources, some courses may rely on printed materials, while others may be based on electronic resources [19, p. 110].

However, it is worth noting that distance learning has a set of challenges and limitations. For instance, the learning process can become less interactive due to the lack of face-to-face communication, which can affect the quality of ESP learning. Issues related to technology can arise, particularly for students living in remote areas or with limited Internet connectivity. In addition, there is also a requirement to effectively assess students' knowledge and prevent potential instances of academic dishonesty during exams and other forms of control.

Interactivity in the educational process refers to students' active involvement in their learning. It involves their active engagement in dialogues with instructors, discussion of the new material,

Advantages and Disadvantages of Using E-textbooks

| orerequisite. |  |
|---------------|--|
| prefer        |  |
| s can arise.  |  |

Table 1

| Advantages  | Disadvantages  |
|---|--|
| 1. They provide access to learning materials at any time and from any location.   | 1. Access to a computer and the Internet is a prerequisite.                                  |
| 2. They are usually cheaper than printed versions.  | 2. They can be inconvenient for students who prefer printed materials.                       |
| 3. They can contain supplementary materials, such as videos and audio recordings, aligning with the multimodality principle and enriching the learning process. | 3. Compatibility problems with different devices can arise.                                  |
| 4. They usually occupy less physical space and are more portable.   | 4. There is a risk of losing access to electronic textbooks due to technical problems.       |
| 5. They can be updated and improved at any time.  | 5. There is the possibility for students to become distracted by other electronic resources. |

interaction with other students, and independent work. It can be achieved through a variety of methods and technologies. One of the most common methods is the work in small groups, enabling students to interact with each other and discuss the learning material under the guidance of an instructor [18, p. 108].

Digital technologies serve as tools for creating interactive distance learning. For instance, web conferencing (e.g. Google Meet, Zoom, etc) allows students to communicate with each other and an instructor online, receiving instant feedback. Certain applications enable students to work with information resources on their personal computers.

Interactivity is an important element of effective learning, involving students in active engagement with the materials and enhancing their comprehension and acquisition of new knowledge. Furthermore, it fosters the development of collaboration, critical thinking, and problem-solving skills [12, p. 60].

Methods of assessing students' academic progress in the context of distance learning of ESP in Ukrainian universities can include the following forms of control: online tests, interactive tasks, creative projects, home assignments, etc. Online tests are frequently used for real-time assessment of students' knowledge and progress and they contain various question types, such as open-ended questions, multiple-choice tests, or tasks that require text or number input. Interactive tasks involve students in collaborative discussions of topics and solving tasks in an online environment [17, p. 103].

Creative projects are more complex and flexible, allowing students to demonstrate their knowledge and skills in different ways, and include research, essays, videos, or presentations. Home assignments resemble the traditional form of assignments but they can be submitted through online platforms to receive feedback from instructors or automatic check of responses [22, p. 758].

Each of these methods has its own advantages and drawbacks, and instructors can combine them to obtain the most accurate and objective assessment of students' progress. It is crucial for instructors to keep in mind the possibility of students' academic dishonesty in distance learning which requires their vigilance.

One of the most commonly used techniques for assessing students' knowledge and progress in the context of ESP teaching is online testing, where students complete tests and receive grades for their responses automatically.

Another approach involves creating quizzes or creative assignments that students submit to instructors through distance learning platforms (e.g. learning management systems (LMS)) or via email. Typically, instructors assess students' submissions using specific criteria and advanced rubrics [7, p. 434].

Furthermore, instructors can monitor students' performance during online sessions by asking them questions and engaging them in discussions on certain topics. To achieve a more objective assessment of the academic performance and progress of students, online examinations can be conducted using special platforms with automated response assessment capabilities. Among the most commonly used online platforms for monitoring academic performance are the following:

**Moodle,** an open-source remote server-based learning program, that enables instructors to create courses, assignments, tests, communities, and discussions and allows students to study and report from anywhere with Internet access.

Google Classroom, a free online learning and classroom management tool, that allows creating courses, submitting assignments, and providing feedback. It also supports integration with other Google tools such as Google Drive and Google Docs.

**Blackboard,** an online platform for creating and delivering online courses, provides students with access to materials and allows them to submit assignments and conduct tests. It also supports video conferencing and contains other interactive tools for effective communication between an instructor and students.

**Zoom** is an online video conferencing platform that is convenient for conducting online classes and sessions and includes various interactive tools, such as screen sharing, chat, virtual whiteboards, etc.

**Edmodo** is a free online learning platform with the ability to create courses, assignments, communities, and other materials for students. It also allows devising tests for training courses with an automated grading system.

Yet it is essential to adapt the methods for monitoring students' academic performance and assessing their progress to the modern requirements of distance learning, taking into account the unique characteristics of this format. Instructors should have sufficient tools and opportunities to test students' knowledge and ensure the objectivity of the assessment process.

To sum up the aforementioned, the opportunities that distance learning provides in the context of learning ESP are as follows:

- 1. Breaking down geographical barriers. Distance learning technologies break down geographical barriers, allowing all students to get equal access to any course and ESP instructors to reach a global audience. This provides exposure to a wide range of contexts, enriching the learning experience.
- 2. **Flexibility.** Students can access ESP courses on their own schedules, accommodating their work or other commitments. This flexibility is a significant advantage for professionals seeking to improve their language skills.
- 3. More personalised learning. Adaptive technologies and online resources enable instructors to

## ІННОВАЦІЙНА ПЕДАГОГІКА

adjust content to individual students' needs and their field of study. This personalization enhances the relevance of the material, making it more engaging and effective [5].

- 4. **Use of multimodal resources**. Distance learning allows the integration of multimedia resources and interactive tools, which makes ESP teaching more engaging and understandable.
- 5. Analysis of big data. Online platforms can collect data on student performance, providing valuable insights for instructors. This data can inform instructors about students' performance and progress and highlight areas where students need additional support.

Thus, distance learning technologies diversify ESP learning, make this process more informative, accessible, mobile and comfortable than other forms. These technologies allow optimizing structural and organizational mechanisms by using modern tools in the educational process.

It is necessary to keep in mind the challenges and develop effective strategies to address them. This is the only way to ensure the successful implementation of distance learning of ESP in Ukrainian universities. For instance, Ukrainian universities are still facing a range of challenges with distance learning such as technological barriers, lack of in-person interaction, sustaining engagement and motivation in a remote setting and organizing objective assessment. It is necessary to minimize the limitations associated with distance learning, such as insufficient opportunities for interaction and control, and lack of access to technology for students. First of all, effective distance learning requires high-quality content and accessible materials. Interactive cooperation between students and instructors is also important. To make the control process more efficient, effective strategies for teaching, monitoring students' performance and assessing their progress should be developed, and they should be provided with the necessary technical means and platforms for learning. The organization of a high-quality ESP teaching involves adapting the curricula and educational programs to the distance learning format in order to find effective mechanisms for a practice-oriented approach; developing teaching and methodological complexes that would not only provide for the acquisition of a system of professional knowledge but also focus on the development of practical skills and personal qualities of a future professional.

One possible way to improve distance learning is to use flexible methods. For instance, combining online ESP courses with traditional forms, such as practical classes and seminars in the classroom. In this way, students will get a more complete and clearer understanding of the material and will acquire the necessary knowledge in greater depth.

Interactivity in the context of distance learning is also significant and can be facilitated through web

conferences and forums, enabling robust communication between students and instructors. This exchange of ideas, questions and responses contributes to the improvement of the quality of learning and more effective mastering of the essential learning materials [6, p. 141].

To ensure students' access to the necessary technical resources and learning platforms, Ukrainian universities have to equip their computer laboratories with the appropriate hardware and software [20].

Ukrainian universities possess the potential for the development of distance learning, and they should make every effort to maximize this potential. This will open up greater opportunities for future development, improve the quality of learning ESP and make education more accessible to a wider range of students.

Conclusions. ESP teaching through distance learning technologies presents both challenges and promising opportunities. The integration of digital technologies into teaching can pose challenges for instructors, especially when they lack sufficient expertise in this area. While challenges such as technological barriers and the lack of face-to-face interaction persist, the opportunities for global reach, flexibility, and personalized learning are compelling. The use of distance learning technologies makes learning more engaging, which is a promising prospect. It also extends access to education for all students, including individuals with physical disabilities or those who reside far from the university or work full-time by providing a flexible learning mode for them. However, distance learning is still undergoing continuous improvement applying the positive experiences of other countries and scientific research. The methods of testing and assessing students' academic performance are still being improved to ensure the objectivity of the assessment process.

Thus, distance learning technologies are effective tools for ensuring access to quality education and improving ESP learning. As technology continues to advance, ESP teaching through distance learning technologies is becoming an integral component of higher education in Ukraine, allowing students to hone their specialized language skills.

#### **REFERENCES:**

- 1. Oleksiienko A., Kotendzhy L., Kyryllova Y., Kaminskyy V., Viesova O. An analysis of the digital university phenomenon: dilemmas, new opportunities. *Futurity Education.* 2022. № 4, vol. 2. P. 18-25. URL: https://doi.org/10.57125/FED.2022.25.12.02.
- 2. Sherman M., Puhovskiy E., Kambalova Y., & Kdyrova I. The future of distance education in war or the education of the future (the Ukrainian case study). *Futurity Education.* 2022. № 3, vol. 2. P. 13-22. URL: https://doi.org/10.57125/FED/2022.10.11.30.
- 3. Tarnavska T., Glushanytsia N. Key pedagogical principles of IT integration in higher education. *Politics, Economics and Administrative Sciences Journal*

- of Kirsehir Ahi Evran University. 2019. Vol. 3(2). P. 129–142. URL: https://dergipark.org.tr/en/download/article-file/905212.
- 4. Башманівський О., Яриновська К. Формування мотивації та вибір методів навчання англійської й польської мов студентами ЗВО в умовах дистанційного навчання. Українська полоністика. 2022. Вип. 20. С. 105-114. URL: https://doi.org/10.35433/2220-4555.20.2022.ped-1.
- 5. Березнікова Н.І. Використання ІКТ для визначення рівня англомовних компетенцій фахового напряму. Американські та британські студії: мовознавство, літературознавство, міжкультурна комунікація. Київ: «Талком», 2016. С. 141-144.
- 6. Булгару Н., Дзятко А. Основні переваги та недоліки технологій та форм дистанційного навчання іноземній мові у технічному закладі. *Innovation and Sustainability*. 2022. № 3. С. 139-144.
- 7. Бурназова В. Інструментальна підготовка майбутнього учителя музичного мистецтва в умовах дистанційного навчання у ЗВО: виклики, перспективи. Психолого-педагогічний супровід фахового зростання особистості в системі неперервної професійної освіти. Бердянськ: БДПУ, 2021. С. 431-437.
- 8. Бялик О. Дистанційне навчання як інноваційна форма професійної підготовки сучасного вчителя. *Перспективи та інновації науки*. 2022. № 11 (16). С. 19-27. URL: https://doi.org/10.52058/2786-4952-2022-11(16)-19-27.
- <u>9.</u> Василенко В. Особливості використання технологій Web 2.0 як основного інструменту іміджевих соціокомунікаційних технологій 3BO. *Бібліотекознавство*. *Документознавство*. *Інформологія*. 2022. № 1. С. 62-71. URL: https://doi.org/10.32461/2409-980 5.1.2022.257262.
- 10. Горіховський М., Оганесян В. Використання різних видів навчання студентів фахової передвищої освіти в умовах війни, теорія та практика. Український педагогічний журнал. 2022. № 3. С. 77-89.
- 11. Гуц Н. А., Ячменик М. М., Руда О. Ю. Дистанційні платформи для навчання і саморозвитку здобувачів вищої освіти в умовах воєнного часу. *Академічні візії.* 2023. № 16. URL: http://dx.doi.org/10.5281/zenodo.7638789.
- 12. Дюжикова Т., Бальоха А., Чепелюк А. Особливості організації освітнього процесу у ЗВО в умовах війни. *Перспективи та інновації науки.* 2022. № 11 (16). С. 58-66. URL: https://doi.org/10.52058/2786-4952-2022-11(16)-58-66.
- 13. Кошелєва О., Кравчук О., Цисельська О. Формування моделі надання освітніх послуг ЗВО в умовах воєнного стану. Бібліотекознавство. Документознавство. Інформологія. 2022. № 2.

- C. 114-122. URL: https://doi.org/10.32461/2409-9805.2.2022.263982.
- 14. Осередчук О. Модель моніторингу якості вищої освіти в Україні. *Витоки педагогічної майстерності*. 2022. № 29. С. 175-180.
- 15. Остропольська Є., Березовський Д., Хорошайло О. Інноваційні методики навчання студентів закладів вищої освіти в умовах дистанційної форми навчання. *ITSynergy.* 2022. № 1. С. 63-75.
- 16. Підлужна С.А., Корчан Н.О., Федорченко І.Л., Литовка, В.В. Особливості та роль самоосвіти ЗВО під час дистанційного навчання. Методика навчання природничих дисциплін у середній та вищій школі: зб. матеріалів Міжнародної науково-практичної конференції (м. Полтава, 26-27 травня 2022 р.). Полтава: Астрая, 2022. С. 174-177.
- 17. Ржечицька С. Проблеми та переваги дистанційного навчання в мистецьких закладах вищої освіти. *Бібліотекознавство*. *Документознавство*. *Інформологія*. 2022. № 3. С. 100-105. URL: https://doi.org/10.32461/2409-9805.3.2022.267003
- 18. Симоненко Н. Пріоритетні напрямки організації дистанційного навчання у медичних ЗВО України. Актуальні питання інтернаціоналізації вищої освіти в Україні: лінгвістичний, правовий та психолого-педагогічний аспекти: зб. матеріалів ІІІ Міжнародної науково-практичної конференції (Біла Церква, 24-25 березня 2022 р.). Біла Церква: БНАУ, 2022. С. 108.
- 19. Снагощенко Л. В. Упровадження інноваційних технологій в організації фізкультурно-оздоровчої роботи ЗВО в умовах дистанційного навчання. Академічна культура дослідника в освітньому просторі: європейський та національний досвід: зб. матеріалів V Міжнародної науково-практичної конференції (м. Суми, 12-13 травня 2022 року. Суми: Видавництво СумДПУ імені А. Макаренка, 2022. С. 110.
- 20. Токуєва Н. В. Використання ресурсів освітнього середовища в умовах дистанційного навчання іноземців в Україні. *Education and Pedagogical Sciences. Освіта та педагогічна наука.* 2022. № 1 179. С. 81-90.
- 21. Черновол Є.О., Чепелюк А.В., Куртяк Ф.Ф. Щодо цифровізації освітнього процесу у закладах вищої освіти України: нові можливості та перспективи. *Академічні візії*. 2023. № 15. URL: http://dx.doi.org/10.5281/zenodo.7595166.
- 22. Швець О. Дистанційне навчання як засіб формування професійної компетентності майбутніх вихователів закладів дошкільної освіти. *Перспективи та інновації науки*. 2022. № 2 (7). С. 755-768. URL: https://doi.org/10.52058/2786-4952-2022-2(7)-755-768.