

CHERNYAKOVA Zhanna

Sumy State Pedagogical University named after A. S. Makarenko

<https://orcid.org/0000-0003-4547-9388>e-mail: janechernyakova@gmail.com**LIANNOI Mykhailo**

Sumy State Pedagogical University named after A. S. Makarenko

<https://orcid.org/0000-0002-3833-2890>e-mail: monnik@ukr.net**BAKATOV Vladimir**

Lviv National University of Veterinary Medicine and Biotechnology named after S. Z. Gzhytsky

<https://orcid.org/0000-0002-4228-3251>e-mail: bakatovv21@gmail.com**KHOLODNIY Alexandr**

SHEE «Donbas State Pedagogical University»

<https://orcid.org/0000-0002-0527-3193>e-mail: holodnijalexandr@ukr.net**PECULIARITIES OF THE PROFESSIONAL TRAINING OF FUTURE PHYSICAL CULTURE TEACHERS AND TRAINERS IN THE CONDITIONS OF DISTANCE EDUCATION**

In the article the modern challenges faced by the higher education system in Ukraine due to the pandemic and Russian military aggression are analyzed. The advantages and disadvantages of implementing distance education in the conditions of modern emergency and crisis situations in the country are presented. Particular attention is devoted to the description of the advantages and disadvantages of the professional training of higher education students of the specialties 014 Secondary Education (Physical Culture) and 017 Physical Culture and Sports in the conditions of distance learning. Attention is focused on the fact that despite all the benefits of the distance learning system, future physical culture teachers and trainers do not have the opportunity to qualitatively master the rational technique of movements from various sports. Despite access to video materials with a demonstration of the reference technique for performing the exercise as a whole and its individual elements, students have limited opportunities for its high-quality consolidation and practice. When students independently study the technique of movements, the teacher does not always can correct technical errors and provide meaningful methodical recommendations, which as a result can lead to the formation of stereotypically incorrect movements of the students of the specified specialties when performing certain exercises. In this context teachers of practice-oriented disciplines are recommended to actively use modern digital technologies and other forms of digital technologies in their work, which allow correcting errors in the execution of exercise techniques and monitoring the physical activity of each student in real time. Despite a few shortcomings of the distance learning system, it remains the only alternative and safe form of obtaining higher education in Ukraine and an effective tool for realizing the constitutional right of the citizens to obtain education and professional qualifications.

Keywords: distance education, peculiarities, professional training, physical culture teacher, coach, higher education.

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1. FORMULATION OF THE PROBLEM

The Covid-2019 pandemic and Russian military aggression have posed new challenges to the higher education system of Ukraine. One of them was the issue of creating a safe and productive learning environment for all participants in the educational process. Distance learning is recognized as the only way of organizing education in the conditions of martial law and emergency situations. Its advantages are flexibility, the possibility of simultaneous involvement of many education students in one place and at a convenient time, as well as the use of a wide range of modern technologies for learning and teaching. Any delays in the

development of education in today's complex realities, according to I. B. Mala, can lead to a decrease of the level of competitiveness of Ukrainian education in the world [6]. Therefore, distance education today is the most cost-effective and safe among other forms of education, and accordingly, a powerful incentive for obtaining higher education in Ukraine.

2. ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

Peculiarities of distance education in emergency conditions and crisis situations that have developed in Ukraine are presented in the scientific works of V. V. Savitska,

O. V. Krychivska [11]. Modern perspectives of distance learning in institutions of higher education, its disadvantages and advantages are highlighted in the works of L. Abyzova et al. [2], H. M. Aliksieieva et al. [3], T. P. Nestorenko [7], A. O. Silenko, N.V. Kruk [13] and others.

The experience of organizing and managing the independent work of the students in the conditions of distance education is described in the scientific work of I. B. Savelchuk, D. D. Bybyk [10] and others. The authors emphasize the expediency of the combination and simultaneous application of traditional and innovative methods and forms of organizing independent work of higher education students. In the scientific work I. B. Mala [6] reveals the essence and features of distance learning as an effective tool of management education, focusing on its methods, forms, and modes.

The peculiarities of distance learning in the system of training specialists in physical education and sports in institutions of higher education are presented in the works of G. A. Shandrygos, V. I. Shandrygos, P. I. Ladyka [12]. The scientific research of R. V. Slukhenska et al. [14] is devoted to the issue of finding and substantiating the ways of rational organization of the discipline «Physical culture and sport» with the help of remote technologies in higher education institutions.

3. FORMULATION OF THE GOAL

To analyze theoretically the peculiarities of professional training of future physical culture teachers and trainers in the conditions of distance education.

This task becomes especially relevant in times of significant transformational changes in all spheres of life [4] in conditions of limited resources [8].

4. PRESENTING THE MAIN MATERIAL

The urgent need to shift to distance education in Ukraine was caused by the Covid-2019 pandemic. Having overcome the consequences of the pandemic, Ukraine faced Russian military aggression. After the introduction of martial law in the country, by the decision of the Ministry of Education and Science of Ukraine, the educational process in all educational institutions was suspended for two weeks. After that the heads of educational institutions were given recommendations to independently, based on specific conditions and circumstances, determine

the form of education for their students: blended or distance learning [13].

It is distance learning in today's conditions that has made it possible to realize the constitutional right of the citizens to obtain education and professional qualifications. Being in any part of the country or the world, the student has access to the educational platform and the opportunity to study according to a flexible schedule, independently determining for him the possibility to be present at the class synchronously or asynchronously, and to join completed tasks at a convenient time. It also empowers education providers the opportunity to protect education students from today's challenges. The only barrier that can prevent a person from receiving education in the conditions of distance learning is the lack of access to the Internet or its instability. Prolonged lack of light and Internet due to mass shelling of critical infrastructure objects in Ukraine posed new challenges to the students and scientific and pedagogical workers, restricted by the limitation of access time to the educational platform and time to complete tasks. All subjects of the educational process had a catastrophic lack of time for high-quality learning and teaching. Most switched to using telephones and Internet communication provided by the mobile operator, which also significantly affected its quality. It should be noted that not all tasks can be performed using the technical capabilities of a mobile phone, which also became a barrier for the students of institutions of higher education. It is worth mentioning that distance learning is based on the student's ability to self-organize to master a significant amount of educational material and this is the basis of obtaining an education in this form.

According to Order No. 466 dated April 25, 2013, of Ministry of Education and Science of Ukraine «On Approval of the Regulation on Distance Learning», distance learning is defined as the process of individual acquisition of knowledge, abilities, skills and methods of activity by a person in a specially created environment with the help of psychological-pedagogical and information-communication technologies, mainly in an indirect interaction with other participants of the educational process [1]. In other words, it is a form of education organization with the use of modern information and telecommunication technologies with

simultaneous territorial remoteness of education providers and recipients.

Distance learning can be implemented under the condition of its system and technical support. Today, for this various hardware tools are widely used, which provide the possibility of interaction between all subjects of distance learning. At the same time distance learning in institutions of higher education can be carried out in synchronous and asynchronous modes. Educational platforms that have the appropriate license and software can host a wide range of educational materials: curricula and methodical recommendations, lectures (their videos and audio recordings) and presentations to them, terminological dictionaries, tasks for practical classes, packages of test tasks for assessment of students' level of knowledge, links to useful web resources and bibliographic sources intended for training.

At present most higher education institutions most often use the Moodle electronic information and educational environment platform for organizing a distance learning system, which is convenient for conducting video conferences and placing educational and methodological material in various formats. This system is considered the most widespread educational platform in the world and can be used in such names as Open Source Course Management System (CMS), Learning Management System (LMS) or Virtual Learning Environment (VLE).

The advantage of a modular, objectively oriented dynamic learning environment is that the platform allows identification of all participants in the educational process during online classes and by completed tasks. Accordingly, only those students who are synchronized with the corresponding educational course can have access to the educational and methodical material.

All lectures and practical classes are held in accordance with the schedule approved by the institution of higher education. Lectures and seminars are conducted online using Google platforms Meet or Zoom, links to which are placed directly on the main page of the training course for faster access. Information of an organizational nature can also be placed here, which students should consider when preparing for classes. For convenience the contact details of the lecturer for receiving current consultations are highlighted on the main page or at the beginning of the course.

Despite the important advantages of the distance education system, it is worth stating its shortcomings, which significantly affect the quality of education. Among them is the need for the student to independently master a considerable amount of educational material, the possibility of copying answers to theoretical questions from the discipline to others, as well as jointly solving test questions, quickly discussing the possible correct options using social networks or other messengers. It should also be noted that it is significantly dependent on the quality of the Internet connection. Each university has a different algorithm of actions if online classes are interrupted by an air alarm. It is possible to continue the class after the air alarm is sounded and with a corresponding shift of the time of the next lecture or seminar, which also complicates the ability of the lecturer and the student to plan their personal time in advance. Another way of action can be the assimilation and processing by students of the educational material that they have not had enough time to cover during the class. Despite the possibility of widespread usage of the synchronous form of distance learning, live communication with students is meaningfully limited.

It is also worth pointing out that the sedentary lifestyle of higher education students, who are forced to be in it due to the need to complete the necessary educational tasks and work in online mode during the class, is extremely dangerous and can provoke several different diseases. This is a potential danger for educators who work for a long time on educational material and its placement on the educational platform. According to I. I. Kovalchuk and M. O. Kovalchuk educators and students spend on average 6-8 hours at computers, which is unacceptable as stated by sanitary standards [5]. Scientists also emphasize that a student motivated to obtain a quality education sees the advantages of distance education, at the same time, the other part of less motivated ones always look for excuses by referring to difficulties that are more imaginary than real.

The significant problems of distance learning are the impossibility of qualitative mastery by students of certain specialties, including such as 014 Secondary Education (Physical Culture) and 017 Physical Culture and Sports, practical skills that are important for further professional activity.

The benefit of this form of education for students who have high sports achievements, are members of national teams in various sports, spend a long time at educational and training meetings or take part in the competitions of various levels is that they do not need to draw up an individual study schedule as before, and it is enough to study at an individual, flexible pace at a convenient time. At the same time, according to the traditional form of education, as noted by G. A. Shandrygos, V. I. Shandrygos, P. I. Ladyka [12], the quality and style of task preparation by student-athletes, who have different psycho-physiological characteristics than ordinary students, is significantly noticeable; it is manifested by the fact that such individuals strive to achieve higher results in sports, and to a lesser extent motivated to in-depth learning of basic theoretical knowledge and practical skills. Their accommodation of the material is characterized by unevenness and jumpiness. But in the conditions of distance education, in contrast to studying according to an individual schedule, student-athletes could join classes more often and complete the assigned tasks on time, which also significantly affects the level of their knowledge during the final control and the quality of the assigned tasks.

The disadvantage of this form of education for students of physical education specialties is the lack of direct contact with the educator and other students, and as a result, not the opportunity to learn, consolidate and practice the necessary practical skills in a collective. The acquisition of knowledge from professional disciplines of a practical direction is based to a greater extent on the independent mastery of a significant amount of theoretical material, and to a lesser extent, on its practical assimilation and practice in available home or other conditions. Some scientists point out that despite the possibility of distance education, it is impossible to qualitatively master the rational technique of movements at a distance, even if the student can use modern sports equipment and computerized simulators, additional video materials demonstrating the reference technique of movement [9].

In this context the scientists M. Sainchuk, N. Verbyn, and A. Sainchuk recommend educators of practice-oriented disciplines of physical education specialties to more widely use the power of Digital technologies and other forms of digital technologies to teach students the sense of movement with the help of media [9]. It is very

important for the teacher to master the technology and ways of applying such technologies for teaching students.

Thus, for recording and measuring various parameters of physical training, including energy expenditure, heart rate, number of steps, distance, and speed. the usage of physical activity and fitness trackers is shown. Such devices include Fitbit, Jawbone Up, Movband 3, Polar Loop, Omron Activity Monitor and Apple Watch. The principle of operation of these devices is to monitor physical activity with the help of built-in activity sensors.

In addition, you can use mobile fitness applications that are available in modern mobile phones. Such applications make it possible, using images, video, audio, and augmented reality, to teach students the correct execution of movement techniques. Each type of such a program is focused on performing a specific task. The application includes lesson plans (training), content with a description of the exercise technique and demonstration examples. Such mobile fitness applications allow you to show the student the correct exercise technique, as well as keep records of training and track their progress. These mobile tools are integrated with CoachMyVideo, Coach's mobile apps Eye, Ubersense visually show the learner that the exercise technique is performed correctly.

Online games – exergames have a powerful potential in teaching sports disciplines. Such types of interactive video games include Xbox Ki-nect, Nintendo Wii; smartphones require game participants to accurately perform a certain kinesthetic movement to advance to the next stage of the game. Accurate devices allow online teachers to quickly correct errors in movement technique and provide students with personalized feedback using tables, charts and graphs adapted to the goals of his subject [9].

Scientists M. Sainchuk, N. Verbyn, A. Sainchuk emphasize that digital technologies are not always the answer to complex pedagogical questions and problems faced by educators and students in sports halls and classrooms, but the introduction of such movement analysis technologies in distance education will help change the ways in which young people understand their bodies, their movements, and the culture of movement [9]. Digital technologies increase the relevance and authenticity of learning that occurs during the teaching of practice-oriented disciplines.

In addition to the specified digital technologies, educators, who work with students of the specialties 014 Secondary Education (Physical Culture) and 017 Physical Culture and Sports, can hold joint video conferences through the Meet or Zoom platforms for more effective organization of practical lessons of sports disciplines. They may add implementing a portable multimedia projector, which allows the educator to simultaneously perceive all students and perform physical exercises together with them. Joint classes can also be held, during which the students, watching the video material personally prepared by the educator or borrowed from the Internet, analyze the mistakes made and point them out. In the same way, the educator, setting a task and subsequently watching a video recording of the students' independent performance of physical exercises, can emphasize the mistakes made orally or through an audio recording and thereby correct the technique of the student's performance of individual elements of the exercise or the exercise. All these processes are time-consuming and require a large amount of time from the educator to check the completed tasks of the students, but the reverse component of such a deficiency in the organization of work is the observance of safe conditions for independent work of the students.

5. CONCLUSIONS

Distance learning allows students to continue to obtain higher education in the conditions that have changed due to the war on the territory of Ukraine and emergency situations that cannot be predicted. They, cooperating with the educator and being in safe conditions, can study and practically assimilate the educational material in a flexible format. The educator can also choose the format of presentation of new material that is convenient for him and his students, plan its form and content in advance; moreover, the educator can save personal time, which should be devoted to checking completed tasks, as an alternative to use thematic and final testing. Also, this form of survey allows for a quick assessment of the student's knowledge level. A significant problem remains the issue of effective organization of practical classes in various sports disciplines for students of specialties 014 Secondary Education (Physical Culture) and 017 Physical Culture and Sports, mastery of which is the basis of further successful and fruitful professional activity. Modern information and digital technologies make it possible to acquire and get practical skills and abilities more efficiently and effectively in the existing conditions.

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Анотація

ЧЕРНЯКОВА Жанна, ЛЯННОЙ Михайло, БАКАТОВ Володимир, ХОЛОДНИЙ Олександр

ОСОБЛИВОСТІ ПРОФЕСІЙНОЇ ПІДГОТОВКИ МАЙБУТНІХ ВЧИТЕЛІВ ТА ТРЕНЕРІВ ФІЗИЧНОЇ КУЛЬТУРИ В УМОВАХ ДИСТАНЦІЙНОГО НАВЧАННЯ

У статті аналізуються сучасні виклики, з якими стикається система вищої освіти в Україні через пандемію та російську військову агресію. Наведено переваги та недоліки впровадження дистанційної освіти в умовах сучасних надзвичайних та кризових ситуацій в країні. Особливу увагу приділено опису переваг та недоліків професійної підготовки здобувачів вищої освіти спеціальностей 014 Середня освіта (Фізична культура) та 017 Фізична культура і спорт в умовах дистанційної форми навчання. Акцентовано увагу на тому, що, незважаючи на всі переваги дистанційної системи навчання, майбутні вчителі та тренери фізичної культури не мають можливості якісно оволодіти раціональною технікою рухів з різних видів спорту. Незважаючи на доступ до відеоматеріалів з демонстрацією опорної техніки виконання вправи в цілому та окремих її елементів, студенти мають обмежені можливості для її якісного закріплення та відпрацювання. При самостійному вивченні студентами техніки рухів викладач не завжди може виправити технічні помилки та надати змістовні методичні рекомендації, що в результаті може призвести до формування у студентів вказаних спеціальностей стереотипно неправильних рухів при виконанні тих чи інших вправ. У цьому контексті викладачам практико-орієнтованих дисциплін рекомендовано активно використовувати у своїй роботі сучасні цифрові технології та інші види цифрових технологій, які дозволяють виправляти помилки у виконанні техніки вправ та контролювати рухову активність кожного студента в режимі реального часу. Незважаючи на деякі недоліки системи дистанційного навчання, вона залишається єдиною альтернативною та безпечною формою здобуття вищої освіти в Україні та ефективним інструментом реалізації конституційного права громадян на здобуття освіти та професійної кваліфікації.

Ключові слова: дистанційна освіта, особливості, професійна підготовка, вчитель фізичної культури, тренер, вища освіта.

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