Analysis Of The Current State Of Training Of Future Specialists In Physical Culture And Sports In The Conditions Of Distance Learning

Olena Otravenko¹, Olena Shkola², Valeriy Zhamardiy³, Olena Sokolenko⁴, Olena Pavliuk⁵, Oleksandr Hadiuchko⁶

- ¹ Ph.D. in Pedagogics, Associate Professor of the Department of Theory and Methods of Physical Education, Luhansk Taras Shevchenko National University, Poltava, Ukraine., https://orcid.org/0000-0001-8308-5895, e-mail: yelenot@gmail.com
- ² Ph.D. in Pedagogics, Professor, Head of the Department of Physical Education, Municipal Establishment «Kharkiv Humanitarian Pedagogical Academy» of Kharkiv, Regional Council, Kharkiv, Ukraine., , https://orcid.org/0000-0003-3013-0423, e-mail: alesikk1974@gmail.com
- ³ Doctor of Pedagogical Sciences, Associate Professor of the Department of Physical and Rehabilitation Medicine, Poltava State Medical University, Poltava, Ukraine., https://orcid.org/0000-0002-3579-6112, e-mail: Shamardi@ukr.net
- ⁴ Ph.D. in Pedagogics, Associate Professor, Head of the Department of Theory and Methods of Physical Education, Luhansk Taras Shevchenko National University, Poltava, Ukraine., https://orcid.org/0000-0002-9374-4548 e-mail: kafedratmfv19@gmail.com
- ⁵ Ph.D. in Pedagogics, Associate Professor of the Department of Olympic and Professional Sports, Luhansk Taras Shevchenko National University, Poltava, Ukraine., https://orcid.org/0000-0003-1779-0232 e-mail: ep290477t@gmail.com
- ⁶ Postgraduate of the Department of Olympic and Professional Sports, Luhansk Taras Shevchenko National University, Poltava, Ukraine., https://orcid.org/0000-0002-9015-7794, e-mail: gadyuchkoalex@gmail.com

Abstract

In the modern development of the education system in Ukraine, the problem of the quality of training of future specialists in physical culture and sports in higher education institutions is relevant. The aim of the study is to conduct an analysis of the current state of training of future physical culture and sports specialists in higher education institutions and online testing of students on the effectiveness of distance learning during forced quarantine. The research was conducted at State institution «Luhansk National University named after Taras Shevchenko», State institution «Donbas State Machine-Building Academy», National University «Zaporizh Polytechnic», Communal institution «Kharkiv Humanitarian and Pedagogical Academy» of the Kharkiv Regional Council during 2019-2022 academic years. Research methods: theoretical; empirical: questionnaires, surveys, pedagogical testing and observation; experimental: ascertaining, formative and control stages of pedagogical experiment, methods of clarity; methods of mathematical statistics. The educational direction of the organization of the educational process provided for the improvement of the content of following educational disciplines: «Theory and methodology of children's and youth sports», «Olympic and professional sports», «Management of the activities of sports organizations», «Theory and methodology of physical education», «Adaptive physical education», «Theory and methodology of sports training», «Sports-pedagogical improvement in the chosen sport», industrial (pedagogical) and coaching practices, based on modular and interactive tools for the development of professional training of future physical education teachers and teacher-trainers.

Keywords: future specialists in physical culture and sports, quality of training, innovations, individualization, intensification, distance learning.

I. Introduction

Modern studies indicate that the theoretical and methodological principles of the professional

training of future physical culture and sports specialists must be constantly updated (Ahippo, 2015) and modernize in the conditions of innovative educational and informational space (Otravenko, 2018). Scientific research on the training of physical culture and sports specialists in institutions of higher education is aimed at monitoring the quality of the educational process in the institution of higher education (Zinchenko, 2013); preparation of trainers for education of teachers of the New Ukrainian School (Sorochan, 2018); distance learning in the system of training specialists in physical culture and (Shandrigos et al., 2015); management of the quality of professional training of future specialists in physical culture and sports in institutions of higher education (Otravenko et al., 2020); academic literacy as a means of intercultural communication and an integral part of the quality of higher education (Otravenko et al., 2021). Considering this problem in the modern European space, scientists paid attention to: dynamics of psycho-emotional state and psychological individual characteristics of students in the process of physical education classes (Griban et al., 2021); formation of digital competence of future physical education teachers in innovative environment (Otravenko, 2020); methodical System of Using Fitness Technologies in Physical Education of Students (Zhamardiy et al., 2020); system of Preparation of Future Fitness Coaches' for Health-Improving Activity in the Conditions of Rehabilitation Establishments (Kornosenko et al., 2020); dynamics of the Functional State of Students in the Process of Powerlifting in Higher Education (Zhamardiy et al., 2020); influence of different training activities on development of junior athletes' logical thinking (Khoroshukha et al., 2021); influence of Sambo Wrestling Training on Students' Physical Fitness (Griban et al., 2021); study of the State of Physical Fitness of Students of Medical Institutions of Higher Education by Means of Crossfit in the Process of Physical Education (Shkola et al., 2021); leisure and recreational activities of student youth in the context of health preservation (Otravenko al., 2021); professional methodology for the competence formation of the students of higher education institutions of physical culture and sports (Griban et al., 2021); dynamics of students' fitness level while differentiating physical

education classes in accordance with their health and nosology of diseases (Griban et al., 2021); the influence of tae-bo on the development of motor potential of students of medical and pedagogical specialties and its efficiency in the process of extracurricular activities (Shkola et al., 2022).

The conducted analysis proved that the problem of improving the process of mastering knowledge in higher education is becoming especially urgent, because the individualization of student learning, first of all, involves the intensification of cognitive activity, which is based on modern methods and technologies of learning (problematic, computer and other), which enable students not only to acquire the necessary professional knowledge, skills and abilities in a short period of time, but also to successfully combine studies at higher education institutions with other types of activities (Ahippo, 2015).

We consider the scientific substantiation of the process of managing the quality of the training of future physical culture and sports specialists as a holistic phenomenon with certain characteristics, principles and laws. First of all, in our opinion, we need to resolve the contradiction between the public demand for high-quality training of competitive physical culture and sports specialists for the conditions of the New Ukrainian School and the insufficient development of methodological support for disciplines, especially in the conditions of distance and mixed learning. Awareness of these contradictions and the need for their effective resolution, as well as the social and practical significance of the problem determined the choice of the topic of our research.

2. Materials and methods

The aim of the study is to conduct an analysis of the current state of training of future physical culture and sports specialists in higher education institutions and online testing of students on the effectiveness of distance learning during forced quarantine.

The research is carried out in accordance with the priority areas of scientific research of the Department of Theory and Methodology of Physical Education of the Educational and Scientific Institute of Physical Education and

Sports State institution «Luhansk National University named after Taras Shevchenko» – «Promising directions for improving the quality of professional training of physical culture and sports specialists» ($N_{\rm P}$ 0117U005556) and «Theory and methodology of specialized training of high school students in the field of sports in the conditions of continuous education» ($N_{\rm P}$ 0108U002431).

The study was conducted in the 2019-2022 academic years based on the cities of Kreminnaya, Kramatorsk, Kharkiv, Zaporizhzhia and Poltava. 308 students of majoring in following specialties took part ascertainment stage of the experiment (online testing): «Secondary education (Physical culture)» and «Physical culture and sports», «Sport» of the first (bachelor's) level of higher education of State institution «Luhansk National University named Taras Shevchenko». State institution «Donbas State Machine-Building Academy», National University «Zaporizka Polytechnic», Communal Institution «Kharkiv Humanitarian and Pedagogical Academy» of the Kharkiv Regional Council. The study covered three stages of scientific and pedagogical research: theoretical and diagnostic (2019); analytical and research (2020); experimental and generalizing (2021-2022).

Following research methods were used at different stages:

- theoretical
 systematization,
 individualization and generalization for the formation
 of systematic knowledge, understanding of the
 essence of the investigated problem;
- empirical study and generalization of work experience on the specified problem, pedagogical observation, questionnaires, online testing, conversations-interviews, surveys, expert evaluation, self-analysis, self-observation to find out motives, needs, level of knowledge, identify and eliminate shortcomings of distance learning; pedagogical experiment (ascertaining and formative stages);
- methods of mathematical statistics used to identify the reliability of the difference between the studied indicators, the correct processing of the results, reflecting them in graphical and tabular forms, conducting an experimental test;

descriptive statistics, determination of statistical significance of differences between groups by the Student's t-test and correlation analysis by the method of Pearson.

3. Results and Discussion

Modern youth have changed the games in the yard to communication in messengers, and the ball to a smartphone, therefore, practical classes with physical exercises have an additional mission to make the young generation move, encourage and get used to physical activity. In order for modern education seekers to want to play sports, teachers need to make efforts: change methods, learn new things, master distance learning technologies. In our opinion, in addition to the educational function, students of higher education should have well-developed informational, research, analytical and controlling functions. We agree with (Sorochan, 2018) that the controlling function combines the managerial and organizational activities of the subjects of methodical work. Controlling is a complex management system aimed at coordinating the interaction of various management structures and monitoring their effectiveness, as well as providing information and analytical support for the preparation and management decision-making processes. So, the problem lies in the need for high-quality training of a sufficient number of qualified physical culture specialists and trainers to implement the strategy of professional development of teachers of the New Ukrainian School in accordance with the educational policy of the state by mastering the latest practices, technologies, methods, forms, methods of professional activity on the basis of innovative educational approaches, taking into account the needs of the state, regions, educational institutions, teachers, society and the public. The modern system of methodical work is based on a close relationship with science, because scientificity is the starting principle for determining the content of education and its results.

We are impressed by the opinion of (Nikolayenko, 2006) that information systems that characterize quality should highlight: the progress of education seekers and the level of success; demand for graduates on the labor market;

satisfaction of students of higher education with educational programs; teaching effectiveness; composition of students and its analysis; available educational resources; the main indicators of the activity of this educational institution and others.

One of the ways to increase the efficiency of higher education institution management is the implementation of innovative approaches in practice. Training exercises are aimed increasing positive motivation, relaxation, mutual understanding, communication, empathy, trust and implementation of gamification, innovative technologies and learning techniques in the educational process of higher education applicants (Donchenko et al., 2020; Shkola et al., 2021; Hryn et al., 2022; Kapustianskyi et al., 2022). So, the process of introducing innovations in the field of higher education management is a complex process, which provides for the gradual updating and improvement of the content, methods, means, management technologies and actively affects the quality of the educational process, especially during the forced quarantine and the transition of the educational process to a mixed form of education.

Blended learning is a qualitatively new approach that combines online, traditional and independent learning (Shandrigos et al., 2015). Experience shows that seniors of higher education institutions who work or are on an individual form of education and athletes who are often at competitions are actively involved in the educational process. The distance form maximizes individualization of learning and allows the teacher to work using individual and differentiated approaches to each student. In our opinion, the introduction of distance courses in the Educational Portal «MOODLE» as a whole receives a rather high rating from students.

A modern graduate of a higher education institution must be a creative person, competitive, professionally mobile, possess strong physical and excellent psychological preparation for further life activities, subjectivity experience, professional and personal competence; able to develop and implement new learning technologies and work in the conditions of an innovative educational and information space (Otravenko, 2018).

The analysis of theoretical studies and practical experience showed that the formation of the physical culture of the personality education seekers in terms of their readiness for creative interaction in the period of distance learning and successful self-realization involves: 1) implementation in educational, scientific, health and sports activities through independent selection of the knowledge system: educational components that form moral, humanistic relations, development of pedagogical tact, mastery of management functions in the field of physical culture and sports; active participation of students in scientific and practical conferences of various levels, webinars, competitions, Olympiads, master classes, create conditions for comprehensive progress of education seekers; 2) the transition of the teacher and students to the technology of pedagogical cooperation to strengthen health and increase work capacity. The system of curricula, educational programs, extracurricular and independent classes is oriented individualization and holistic nature of education based on a student-centered approach, mastering foreign languages, introduction of modern information and innovative technologies, means of recovery, physical culture and sports, active leisure and recreation; 3) the personal physical culture of the winners is reflected in their attitude to the values of physical culture and sports. In this case, the main place is occupied by active motor functioning, motivation to engage in physical exercises and conscious maintenance of a healthy lifestyle. It was determined that the formation of a student's personal physical culture is influenced by the means of physical culture and sports, which are mechanisms of influence on the inner essence of a person, his spirituality, emotionality and expressiveness (Otravenko, 2015). This approach has great health and recreational value.

We agree with the opinion of scientists that one of the urgent problems of modern pedagogical science is the need to determine the influence of professional and applied physical culture on the formation of the personality of students. For the effective functioning of modern society, a qualified specialist is needed, who not only has a perfect command of a certain specialty, manages his physical fitness, psychosomatic

health, but also has highly developed value orientations (Otravenko et al., 2020; Zhamardiy et al., 2020; Griban et al., 2021; Shkola et al., 2021).

We support the opinion of (Ivanii, 2014) that at the current stage, the training of physical education and sports specialists is focused on the individual, its value orientations, formation of motives (interests and needs in types of physical and sports activities), development of moral and volitional qualities. In this direction, work on the formation of knowledge and practical skills of a healthy lifestyle is organized, which naturally involves a significant expansion of information on the history of physical culture, the basics of hygiene, biomechanics, psychology and physiology of physical exercises, training and methods of individual and group physical education and sports.

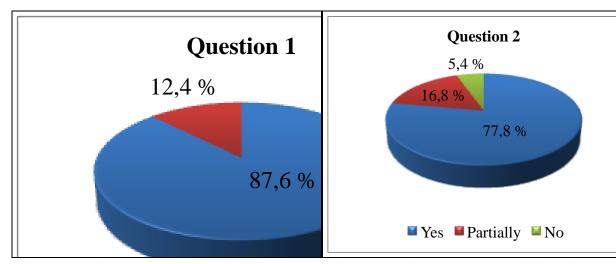
During the 2020-2021 academic year, we conducted sociological research methods (онлайн-опитування (308 students of I-IV courses, full-time studies, using Google Forms), which we used to determine motives and interests in types of motor activity and sports, the attitude of student youth to the organization of the educational process on various online platforms during quarantine restrictions. Teachers of the Department of Theory and Methods of Physical Education, Department of Olympic Professional Sports, the department of physical education and sports improvement, the department

of physical culture and sports management have developed distance courses in professional disciplines. Methodological support of educational process involves, along with traditional forms, the introduction of the latest learning technologies; extensive use of the resources of the local network of departments, educational and scientific institutes and faculties of physical education and sports, universities as a whole, use of the Internet, modern multimedia software tools, distance learning site Moodle «Educational Portal of LNU», social networks Viber, Facebook, YouTube, Direct (Instagram), Telegram, Skype for active communication and communication; changes in the control format using online tests and performing creative tasks (Otravenko et al., 2021).

The analysis of the attitude of the applicants to study in a mixed form of education showed the following results (Fig. 1; Fig. 2).

That is, as we can see from Fig. 1. some of the teachers, namely 12.4 %, were not able to fully master the process of online education during the quarantine period, with online presentations, video showing, online boards and other applications.

Based on the answers to the second question, 5.4 % of the respondents indicated «No» and 16.8 % – partially faced with interruptions of light or Internet, some teachers faced the problem of failure of the computer device (Fig. 2.).



teach at your place provided high-quality distance courses? %

Fig. 1. Question 1: Have all the teachers who Fig. 2. Question 2: Do teachers follow the schedule of online classes? %

Next, we found out, «What information resources do teachers use for online learning?» (Fig. 3).

Therefore, teachers are not limited in choosing a platform, as we can see from Fig. 3. and at their discretion, in most cases, independently choose a platform for online learning. However, Moodle (83.3%) and Zoom (77.8%) remain the most

convenient and popular platforms at this time. Viber holds third place (73.6 %). Teachers also use e-mail for correspondence and communication (61.1%). Skype holds fifth place (30.6 %). Electronic gadgets (phones together with Telegram) shared the sixth and seventh positions (29.2 %).

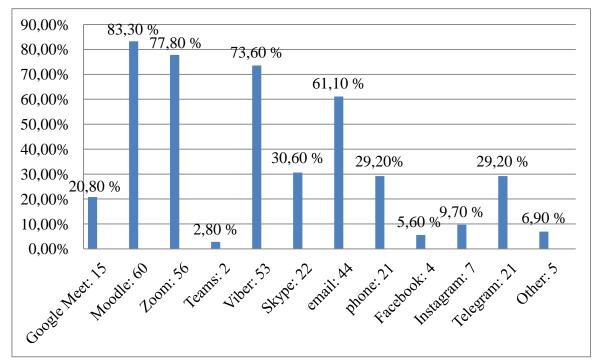


Fig. 3. Question 3: What information resources do teachers use for your online education? One or more answer options

Therefore, let's study problem further using following questions: «Are Zoom, Teams or Google Meet platforms convenient to use for

conducting online classes?» and «How has student attendance changed during online learning?» (Fig. 4; Fig. 5).

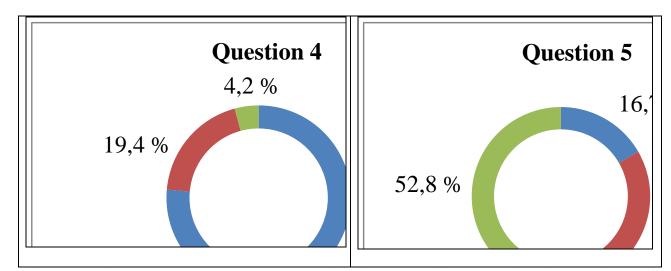


Fig. 4. Question 4: Are Zoom, Teams, or Google Meet platforms convenient to use for conducting online classes? %

Fig. 5. Question 5: How has the attendance of students in your group changed during online training? %

Applicants noted that the Moodle platform is the most convenient for attaching tasks and their assessment, but it needs to be constantly refined and improved. Most programs do not have enough functionality for the best mastery of a particular topic. Therefore, they must be used as necessary.

First of all, the attendance of classes increased for applicants who were engaged in individual training, and decreased for some due to increased illness or a weak Internet connection (Fig. 6; Fig. 7).

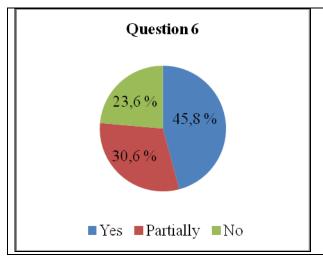


Fig. 6. Question 6: Would you like the elements of distance education to be used in the future? %

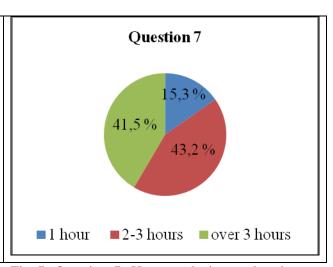


Fig. 7. Question 7: How much time a day do you spend on physical activity? %

However, the majority of higher education seekers wish to continue using, at least partially, online education on various platforms.

Also, realizing that the physical activity of the applicants has significantly decreased due to quarantine restrictions, we conducted an additional survey about their physical activities, workload and manifestation of motor skills (Fig. 8).

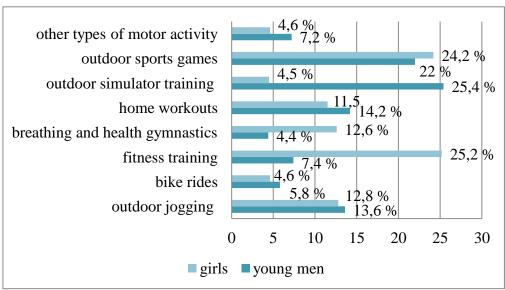


Fig. 8. Question 8. What kind of physical activity do you do during the quarantine period? %

Among the answers the most interesting were (Fig. 8): among young men, classes on street

simulators took first place (25.4 %), while girls preferred fitness classes (25.2 %), however, only

14.2 % of boys and 11.5 % of girls paid attention to physical exercise training at home (Fig. 9;

Fig. 10).

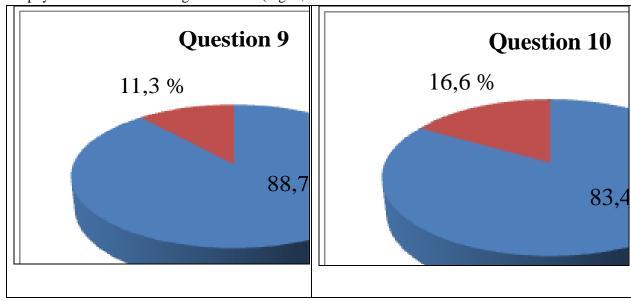


Fig. 9. Question 9: Is it possible to train in various sports on sports grounds in your city? %

Fig. 10. Question 10: Do you have the opportunity to engage in physical activity, using athletic tracks or outdoor exercise machines? %

Applicants noted that there is an opportunity for classes, but during the quarantine, gyms with simulators, swimming pools and other specialized areas almost all are closed.

Answers to question 11: «What, in your opinion, are the advantages of distance education?» are presented in table 1.

Table 1. A generalized part of the applicants' answers regarding the advantages of distance education

Answers of students of higher education	Ranking
	place
No need to spend a lot of time on the way to the university.	1
There is more free time.	2
No physical attachment to a specific location, very convenient.	3
There is an opportunity to talk individually with the teacher and develop a schedule of	4
individual classes.	
It is very suitable for students who work according to the specialization profile.	5
Writing tasks by hand decreased, more practice in typing.	6
The possibility of adjusting the schedule of some subjects, the possibility of studying	7
with a cold without exposing the health of others to danger.	
Availability of educational materials and electronic platforms.	8
Learning in a calm environment.	9
Mobility.	10
Ability to learn at your own pace.	11
Easy. I can visit pairs between training and even if I am at a meeting in another	12
country.	

So, from Table 1, we can see that among the answers of the applicants regarding the advantages of distance education, the first three ranked places were occupied by the answers: no need to spend a lot of time on the way to the university, more free time has appeared and there is no physical attachment to a certain location, and it is very convenient.

At the stage of the formative stage of the educational experiment, methods development of professional competences for the teaching and coaching activities of future specialists in physical education and sports were improved in the form of a structure of the program complex of following educational disciplines: «Organizational and managerial activities for the training of physical culture and sports specialists», activities «Management of the of sports organizations», «Theory and methodology of children's and youth sports», «Olympic and professional sports», «Theory and methodology of sports training», «Theory and methods of physical physical education», education», «Adaptive «Innovative technologies in physical education and sports», «Modern methods of scientific research in physical education and sports», «Sports-pedagogical improvement in the chosen sport», pedagogical (production) and coaching practices, based on modular and interactive tools for the development of professional training of

future physical culture and sports specialists. With the help of the «MOODLE» system, educational and methodological support for the educational components of the disciplines of the professional cycle was formed. The effectiveness of the formation of knowledge of future specialists in physical culture and sports increased in the process of studying the updated content of professional information in comparison with the traditional. The number of «good» grades increased by 12 % and «excellent» by 8 % on state exams in professional disciplines. The number of prepared and successfully defended creative and term papers increased (9 %). So, in general, the average score of the quality of knowledge of future physical culture and sports specialists increased by almost 21 %.

Indicators of the degree of mastery of knowledge regarding the use of computer technologies by students of higher education (the confirmatory stage of the experiment) are presented in Table 2.

Table 2. Indicators of the degree of mastery of knowledge regarding the use of computer technologies by students of higher education (assertaining stage of the experiment)

№	Questions	Answers	Control	Experimental	
			group, %	group, %	
1.	Do you use modern computer	during preparation for	30.4	26.9	
	information technologies?	class			
		during class	21.8	22	
		other	47.8	38.1	
2.	What information and computer	text editor	38.1	29	
	technologies do you use?	electronic tables	2	3	
		electronic presentations	1.1	2	
		multimedia discs	24.5	20	
		specialized programs	2	3	
		Internet	32.2	40	
		other	1.1	3	
3.	How often do you use Internet	everyday	49.6	51	
	technologies?	1 − 2 times a week	30.5	32	
		3 – 4 times a week	30.1	24	
		other	8.8	2	
4.	Do you think that the use of	Yes	60.8	59.1	
	information and computer technologies	No	39.2	31.9	
	(ICT) significantly facilitates the				
	preparation for classes and allows you				
	to diversify your work?				
5.	Are conditions created in your	Yes	80	80	

	institution of higher education for	No (problems with the	20	20
	conducting online classes using	internet)		
	modern ICT technologies?			
6.	What problems arise when using ICT?	We do not have the	10.6	15.6
		opportunity to engage in		
		ICT		
		We don't have time to	89.4	85.4
		do ICT		
7.	What digital educational resources do	Various books, articles,	38.4	49
	you use most often?	websites, etc.		
		Google, games	41.6	31

So, after determining the degree of mastery of knowledge regarding the use of information and computer technologies (ICT), we analyzed the indicators of the control and experimental groups, which are almost indistinguishable or have a small difference (Table 3).

Table 3. Indicators of the degree of mastery of knowledge regarding the use of computer technologies by students of higher education (formative stage of the experiment)

№	Questions	Answers	Control group, %		Experimental group, %		
			beginning	end	beginning	end	
1.	Do you use information and	during	30.4	30	26.9	58	
	computer technologies (ICT)?	preparation for					
		class					
		during class	21.8	25	22	41	
		other	47.8	45	38.1	1	
2.	What ICT do you use?	text editor	38.1	30	29	10	
	(the question includes multiple	electronic tables	2	5	3	12	
	answers)	electronic	0.1	0.2	2	78	
		presentations					
		multimedia discs	25.5	25.8	20	0	
		specialized	2	0	3	0	
		programs					
		Internet	32.2	39	40	0	
		other	0.1	0	0	0	
3.	How often do you use Internet	everyday	39.4	63	53	78	
	technologies?	1-2 times a	30.5	22.5	32	21	
		week					
		3-4 times a	30.1	20.5	13	1	
		week					
		other	8.8	7.9	2	0	
4.	Do you think that the use of	Yes	60.8	59.8	59.1	98	
	ICT significantly facilitates	No	39.2	30.2	31.9	2	
	preparation for classes and						
	allows you to diversify your						
	work?						
5.	Are conditions created at your	Yes	40.9	41	39.4	81	
	educational institution for	No	59.1	59	51.6	21	

	conducting online classes					
	using information and					
	computer technologies?					
6.	What problems arise when	We do not have	10.6	15	15.6	89
	using information and	the opportunity to				
	computer technologies?	engage in ICT				
		We don't have	89.4	85	85.4	11
		time to do ICT				
7.	What digital educational	Various: books,	38.4	41	69	90.3
	resources do you use most	articles, websites,				
	often?	etc.				
		Google, games	41.6	59	31	9.7

We have defined three levels of indicators of mastery of information computer technologies and distance learning technologies, working on

different platforms: low; average; high (see table 4).

Table 4. Indicators of the level of mastery of information computer technologies and distance learning technologies (formative stage of the experiment)

		ICT proficiency levels on		
Exercises	Groups	different platforms		rms
		Low	Medium	High
In the word processor Microsoft Word, create a text	CG	17%	45%	38%
document with a description of the technique of	EG	10%	40%	50%
performing some physical exercise.				
Document size 1–2 pages, page parameters: top and				
bottom margins – 2 cm, left – 3 cm, right – 1.5 cm,				
single line spacing.				
In the Microsoft Excel spreadsheet, create the table	CG	24%	40%	36%
«Average performance of the students of the group»	EG	18%	36%	46%
according to the sample (the number of columns and				
rows, the names of the subjects and the group may not				
match, the names of the students should be replaced).				
Based on the created table, build a histogram				
(bar chart).				
In the Microsoft Power Point program, create a	CG	16%	42%	42%
presentation of your specialty that contains:	EG	10%	30%	60%
 at least 7 slides; 				
 text explanation of the exercise; 				
 figures or tables; 				
 object animation; 				
an organizational chart or a video fragment of				
the lesson.				
Create a Gmail mailbox on the website	CG	15%	48%	37%
www.google.com.ua.	EG	12%	30%	58%

Note: EG stands for experimental group, CG stands for control group

Analyzing the comparative data of the given levels, we can state that the majority of higher education applicants of the control and experimental groups are on medium level (about 40 %); students of the experimental group increased the high level of readiness to use information technologies on various online learning platforms from 33 % to 50 %, but it takes time to use these platforms for practical work. During offline classes, students spend a lot of time on training and competitions.

4. Conclusions

The analysis of the current state of training of future specialists in physical education and sports made it possible to contribute to the high-quality training of students of higher education in the conditions of forced quarantine by following: the level of mastering by students of the latest practices, technologies, methods, forms and means of professional activity on the basis of student-centered and innovative approaches has increased, favorable conditions were created for the professional and creative growth of future specialists, the competitiveness of the institution of higher education, especially in conditions of mixed forms of education. A feature of the latest approaches distance learning to individualization, intensification of learning, an integral combination of traditional learning methods with innovative, aimed at modeling professional situations; creative cooperation and successful self-realization during distance and mixed forms of education, that contribute to the development of information, research, analytical and controlling functions. Online testing of students conducted was regarding effectiveness of distance learning during the forced quarantine. The second part of our study concerned the physical activity of students of higher education (physical intensity during quarantine restrictions: the amount of time spent on exercises, which the student devotes to physical development, which types of motor activity he pays the most attention to, the availability of open and closed sports grounds in the place of residence, etc.). After receiving the data, we tried to motivate the applicants as much as possible to be active during the quarantine,

filmed motivational videos and fragments of online training, took an active part in webinars on Olympic and military-patriotic topics, in master classes (teach your neighbor to perform the exercise correctly), etc.

Currently, during the mixed form of education, although some improvement observed, there are still many issues that should be paid attention to in order to organize a highquality educational process taking into account the basic requirements for distance technologies and to perform practical tasks on physical activity, formation and maintenance psychological, positive emotional state of youth, continuous development of physical qualities, upbringing of a full-fledged, harmoniously developed, physically and mentally healthy personality in the difficult time of the pandemic and martial law in Ukraine.

Therefore, in our opinion, the mixed learning process for the majority of students of higher education is positively perceived in mastering the educational components of the professional cycle of specialties «Secondary education (Physical culture)» and «Physical culture and sports», «Sport», especially in conditions of forced quarantine to increase motor activity. However, not as the main one, but only in some exceptions (the applicant is on an individual training schedule through training sessions to prepare for important Ukrainian, European or world competitions or works in a specialty, or due to quarantine restrictions).

We see the development of scientifictheoretical and methodological principles of monitoring the quality of training of future specialists in physical education and sports in children's and youth sports schools as promising directions for scientific research within the limits of the studied problem.

References

1. Ahippo, O. Yu. (2015). Current state and problems of individualized education of students. Pedagogy of creative personality formation in higher and secondary schools: collection of scientific papers. Zaporizhzhia. 42:507–514.

- 2. Donchenko V. I., Zhamardiy V. O., Shkola O. M., Kabatska O. V., Fomenko V. H. Health-saving Competencies in Physical Education of Students. Wiadomości Lekarskie, 2020; LXXIII; 1:145–150. PMID:32124825
- 3. Griban, G., Kuznietsova, O., Lyakhova, N., Prystynskyi, V., Oleniev, D. et al. (2021). Dynamics of students' fitness level while differentiating physical education classes in accordance with their health and nosology of diseases. Wiadomości Lekarskie, 74:3(II):641–646. doi: 10.36740/WLek202103214.
- 4. Griban, G., Dzenzeliuk, D., Dikhtiarenko, Z., Yeromenko, E., Lytvynenko, A. et al. (2021). Influence of Sambo Wrestling Training on Students' Physical Fitness. Sport Mont, 19(1):89–95. doi: 10.26773 / smj.210219.
- 5. Griban, G., Oleniev, D., Sirenko, R., Zhyla, S., Otravenko, O. et al. (2021). Methodology for the professional speech competence formation of the students of higher education institutions of physical culture and sports. Applied Linguistics Research Journal, 5(6):157–167. doi: 10.14744/alrj.2021.71245.
- 6. Griban G., Prontenko K., Zhamardiy V., Tkachenko P., Kruk M. et al. (2018). Professional Stages of a Physical Education Teacher as Determined Using Fitness Technologies. Journal of Physical Education and Sport, 18 (2):565–569. doi:10.7752/jpes.2018.02082
- 7. Hryn V., Kostylenko Y., Pinchuk V., Zhamardiy V., Donchenko V., Honchar O., Hordiienko O. (2022).Experimental analysis of ways viral infections into the human body. Wiadomosci Lekarskie, LXXV; 6:1544-1549. doi: 10.36740/WLek202206121
- 8. Hryn V., Yudina K., Donchenko V., Zhamardiy V., Horoshko V. (2022). Eponymous terms in the morphology of angioarchitectonics of the human head. Wiadomosci Lekarskie, LXXV; 6:1583–1591. doi: 10.36740/WLek202206129

- 9. Zinchenko, V. O. (2013). Monitoring the quality of the educational process in a higher educational institution: monograph. State institution «Luhansk National University named after Taras Shevchenko». Luhansk. 360 p.
- 10. Ivaniy, I. V. (2014). Physical culture of the personality of a physical education and sports specialist: study book. Sumy. 96 p.
- 11. Kapustianskyi D., Ivanytskyi I., Ivanytska T., Zhamardiy V., Donchenko V. (2022). Differential diagnosis of soft tissue tumors. Wiadomosci Lekarskie, LXXV; 6:1596–1599. doi: 10.36740/WLek202206131
- 12. Kornosenko, O., Denysovets, T., Danysko, O., Synytsya, S., Voloshko, L. et al. (2020). System of Preparation of Future Fitness Coaches' for Health-Improving Activity in the Conditions of Rehabilitation Establishments. International Journal of Applied Exercise Physiology, 9(8): 33–41.
- 13. Nikolayenko, S. (2006). The quality of higher education in Ukraine a look into the future. The world of finance, 3(8):7–22.
- 14. Otravenko, O. (2020). Formation of digital competence of future physical education teachers in innovative environment. Pedagogy of creative personality formation in higher and secondary schools. 70(3):180–184.
- 15. Otravenko, O. V. (2015). Formation of student personality's physical culture as subject of professional functioning Physical education of students. 6:50–55. doi: 10.15561/20755279.2015.0607.
- 16. Otravenko, O. V. (2018). Monitoring the quality of professional training of future physical culture teachers in the innovative educational and informational space of higher education institutions. Physical education, sports and human health, 11:282–291. doi: 10.32626/2309-8082.2018-0.%25p
- 17. Otravenko, O. V., Gadyuchko, O. S. (2020). Management of the quality of

- professional training of future specialists in physical culture and sports in institutions of higher education. Drohobych. 29(3):200–206. doi: 10.24919/2308-4863.3/29.209576.
- 18. Otravenko, O. V., Shehavtsova, S. O., Dovgan, N. Yu. (2021). Academic literacy as a means of intercultural communication and an integral part of the quality of higher education. Bulletin of Luhansk National University named after Taras Shevchenko, 2(340):211–222. doi: 10.12958/2227-2844-2021-2(340)-1-211-222.
- 19. Otravenko, O., Shkola, O., Shynkarova, O., Zhamardiy, V., Lyvatskyi, O., Pelypas, D. (2021). Leisure and recreational activities of student youth in the contextof health-preservation. Journal for Educators, Teachers and Trainers, 12(3):146–154.
- 20. Sorochan, T. (2018). Training of trainers for teaching teachers of the New Ukrainian School. Methodist. Publishing house. 2:4–9.
- 21. Khoroshukha, M., Griban, G., Terentieva, N., Tkachenko, P., Petrachkov, O. et al. (2021). Influence of different training activities on development of junior athletes' logical thinking. International Journal of Human Movement and Sports Sciences, 9(1):62–70. doi: 10.13189/saj.2021.090109
- Shandrygos, G. A., Shandrygos, V. I., Ladyka, P. I. (2015). Distance learning in the system of training specialists in physical culture and sports. Scientific journal of NPU named after M. P. Drahomanov, 5K(61):270–273.
- 23. Shkola, O., Fomenko, O., Otravenko, O., Donchenko, V., Zhamardiy, V. et al. (2021). Study of the State of Physical Fitness of Students of Medical Institutions of Higher Education by Means of Crossfit in the Process of Physical Education. Acta Balneologica, LXIII;2(164):105–109. doi: 10.36740/ABAL202102105.

- 24. Shkola, O., Otravenko, O., Donchenko, V., Zhamardiy, V., Saienko, V., Tolchieva, H. (2022). The influence of tae-bo on the development of motor potential of students of medical and pedagogical specialties and its efficiency in the process of extracurricular activitiesh. Wiadomości Lekarskie, LXXV;4(1):865–870. doi: 10.36740/WLek202204121
- 25. Zhamardiy V. O., Donchenko V. I., Yemets A. V., Skrinnik Y. O. (2019). Physical Development by Means of Fitness Technologies as One of General Aspects of Student's Health. Wiadomości Lekarskie, LXXII; 5:1074–1078. PMID: 31175747
- 26. Zhamardiy, V., Griban, G., Shkola, O., Fomenko, O., Khrystenko, D. et al. (2020). Methodical System of Using Fitness Technologies in Physical Education of Students. International Journal of Applied Exercise Physiology, 9(5):27–34.
- Zhamardiy V. O., Shkola O. M., Okhrimenko I. M., Strelchenko O. G., Aloshyna A. I. et al. (2020). Checking of the Methodical System Efficiency of Fitness Technologies Application in Students' Physical Education. Wiadomości Lekarskie, LXXIII; 2:332–341. PMID: 32248171
- 28. Zhamardiy, V., Shkola, O., Otravenko, O., Momot, O., Andreieva, M. et al. (2020). Dynamics of the Functional State of Students in the Process of Powerlifting in Higher Education International Journal of Applied Exercise Physiology, 9(10):24–35.
- 29. Zhamardiy, V., Shkola, O., Tolchieva, H. & Saienko, V. (2020). Fitness Technologies in the System of Physical Qualities Development by Young Students. Journal of Physical Education and Sport, 20(1);19:142–149. doi:10.7752/jpes.2020.01019