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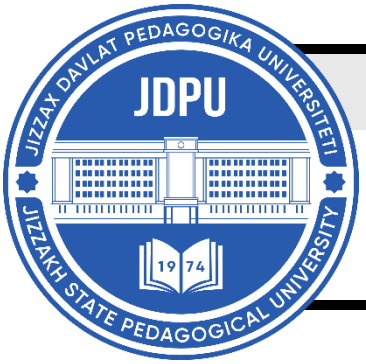

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PROFESSIONAL AND APPLIED PHYSICAL TRAINING OF THE PROFILES OF THE "AQUACULTURE" PROFILE WITH THE ADVANTAGE OF USING THE FUEL SERVICE

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ABOUT ARTICLE

Key words: PAPT, Aquaculture, swimming, training of future specialists, professional activity, students, education, block program, physical training.

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Abstract: The article explains a methodology for the implementation of the block program of professional-applied physical training (PAPT) with the use of funds of the swimming, namely the aquaginastics, aquatiling, underwater orientation, Friday, aquathlon, aquavisburism, the application of the fatal, aquatician, the application of the specialists. It was found to be aware of the analysis of the literary sources and the police of the specialists, it was found that the ability to swim, well-navigate the water and under water, to provide first aid of water is the key qualities necessary for a specialist profile "Aquaculture". The experience has been proven effectively in the article. The data will be useful for students, teachers, specialists of the profile "Aquaculture", the regulation, training of future specialists, professional activities, students.

INTRODUCTION

In the modern world, training specialists to the working conditions requires new innovative approaches that include a complex of specific qualities necessary for a particular profession. It becomes more and more urgent organizing professional-applied physical training in accordance with the requirements for the profession. The basis for the successful training of students for high-performance works is the process of planned training and training and the formation of professional-applied physical qualities throughout the time of training in the university [1, 10, 11]. In the world there is increasingly relevant topically and methodically sound application of professional-applied

physical training in the process of training of agricultural specialties. Studies of new scientifically sound forms, funds and methods of physical education, relevant requirements of scientific and technological progress, is now the most important task of the theory and the techniques of physical cultural traffic. A number of modern research shows that physical training of specialists is not able to fully solve the tasks facing the universities, since modern requirements in the organization of labor dictate the specialists and skills of the work of the results of the skills and skills.

THE AIM OF THE RESEARCH to increase the effectiveness of preparing specialists of the profile of "aquaculture" by improving the content of the PAPT program with the advantage of using the swimming conditions.

METHODS OF RESEARCH analysis and generalization of scientific and methodological literature, pedagogical observation, questionnaire, modeling, vocational training, pedagogical testing, pedagogical experiment, methods of mathematical statistics.

RESEARCH RESULTS AND THEIR DISCUSSION

In the course of the pedagogical experiment, the features of professional activity of the profile of "aquaculture" profiles were associated with physical preparedness. In the structure of the work of the professionals of the "aquaculture" specialists, it is necessary to work on natural and artificial reservoirs, coastal zones, in various climatic conditions. Therefore, they should have been developed resistance to various wisped irritation, the ability to maintain the balance, high coordination and accuracy of movements [9, 13]. Based on the survey conducted among profiling specialists, the study of the indicators of the leading physiological characteristics and physical qualities developed a model of the specialists of the profile of the aquaculture (Fig. 1).

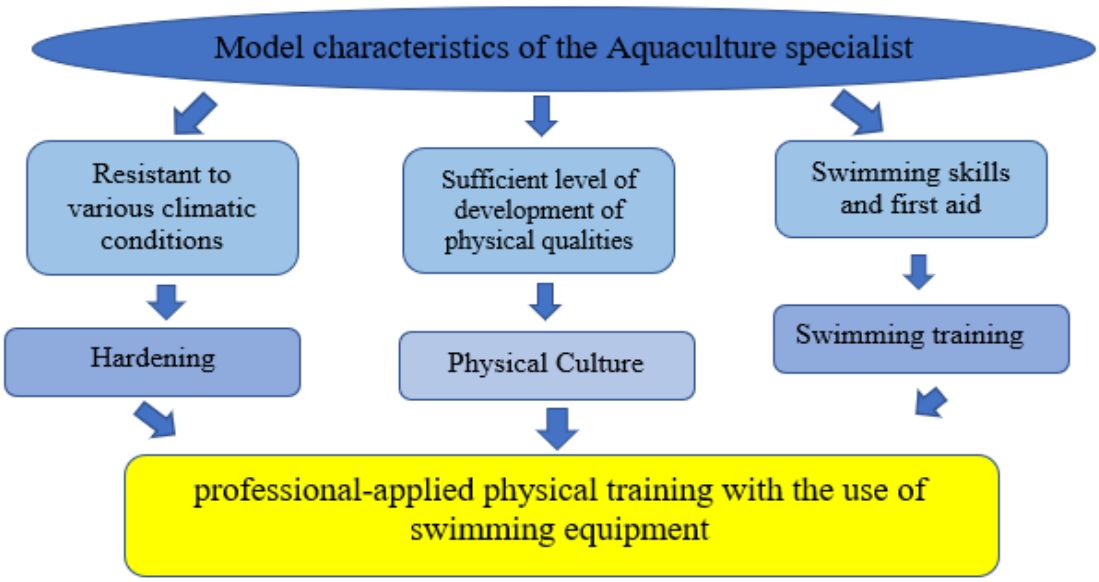

Fig. 1. Model characteristics of the Aquaculture specialist

In the course of studying and analyzing the specifics of this specialty, based on the data obtained from literary sources, observation of professional activity and the identified model of a specialist in

the “Aquaculture” profile, we developed a professiograms of a specialist in this profile [4, 5, 15]. Also, control exercises were selected to assess the level of development of physical qualities and skills necessary in the professional field, blocks of professionally applied physical training were developed with the advantage of using swimming facilities, including tasks, content, directions, methods and means of implementation (table 1).

Table 1.

Block system of the PAPT with the use of navigation aids

Training profile "Aquaculture"			
Types of swimming training	**Characteristic**	**Distribution hours**	
		1 course 108 hours	1 course 108 hours
aquagymnastics	Wellness classes in the water (swimming, walking and running along the bottom, strength, general developmental exercises to music)	20 hours	
Applied swimming	The ability of a person to stay on the water (that is, to have the skill of swimming) and to perform vital actions and activities in the water	44 hours	28 hours
Aquabuilding (power exercises in water)	Performing general developmental exercises in water (for legs, arms, jumping, exercises for back muscles) with different speeds of movement	24 hours	
Aquathlon	Single fights under the water (it is forbidden to tear off the mask for scuba diving, to carry out suffocating and painful techniques)	20 hours	
Aquavibro gymnastics	Training with the use of vibrating dumbbells, the mass and length of which are selected taking into account the characteristics of the physique (height, weight) of those involved.		26 hours
Underwater orientation	Independent sports discipline according to the rules of orientation in the aquatic environment		22 hours
Freediving - underwater diving while holding your breath	Varieties: constant weight (diving along the cable, without using hands); static apnea (holding the breath for the maximum time on the surface of the water, in static); diving maximum distance while holding your breath		32 hours

Complex exercises for assessing the level of professionally applied physical fitness were developed on the basis of the results of the survey of the first stage of the study and the professiograms. Complex exercises for the preparatory stage contained elements of the previously studied sections on physical training. Complex exercises for the final stage of training contained elements of physical and professional-applied physical training.

A comprehensive assessment was developed taking into account the characteristic features of the “Aquaculture” profile. First, the average performance of the exercises was determined. As a result,

rating scales were developed, which made it possible to determine the number of points in each exercise to characterize the level of a specialist.

During the implementation of the block program, such means of swimming were used as: aqua gymnastics, aqua building, underwater orientation, free diving, aquathlon, aqua vibro gymnastics, applied swimming.

Activation of swimming facilities made it possible to prevent colds, contributed to hardening, adaptation to working conditions in the aquatic environment, strengthening the respiratory apparatus, developing the necessary special physical qualities, and endurance to natural conditions [6, 8, 12, 14].

In the course of the pedagogical experiment, concrete confirmation of the effectiveness of the PPFP block system was obtained with the advantage of using swimming facilities, taking into account the professional activities of future specialists in the “Aquaculture” profile. The experiment involved 100 first-and second-year students of the Branch of the federal state budgetary educational institution of higher education "Astrakhan State Technical University" in the Tashkent region of the Republic of Uzbekistan.

Analysis of the test results showed that by the end of the academic year, the vital capacity of the lungs significantly improved (P> 0.001). Obviously, the advantage of the subjects of these groups can be explained by the use in the academic year of a large amount of special swimming facilities in the block system, aimed at developing special physical qualities necessary for technical specialists.

The most significant changes occurred in the indicators of physical fitness. Analysis of the initial data of the state of physical fitness of the subjects showed that there were no significant differences in most indicators (P>0.01), which indicates the relative homogeneity of the groups at the beginning of the experiment. Control tests received at the end of the academic year indicate that the subjects of the experimental groups experienced a significant improvement in most indicators compared to the control ones. More positive changes in the experimental groups occurred in the types of tests that characterize speed, speed-strength qualities and general endurance (P>0.01).

Control standards for assessing the level of development of professionally significant physical qualities were taken before and after the end of the experiment. At the end of the main experiment, control tests were taken again. Comparing the average results of the control and experimental groups at the end of the experiment, it can be noted that the performance of the experimental group significantly exceeds that of the control group (Table 2).

Table 2

Indicators of physical readiness of the CG and the EG at the beginning and at the end of the experiment

Exercises	Before experiment		P	After the experiment		P
	CG	**EG**		**CG**	**EG**	

Canoe run 10 to 10 m (s)	28,0 ± 0,4	28,0 ± 0,3	> 0,01	27,6 ± 0,6	26,2 ± 0,2	< 0,01
Flexion and extension of the arms (number of times)	32,0 ± 0,3	31,6 ± 0,3	> 0,01	36,6 ± 0,4	42,2 ± 0,3	< 0,01
Jumping rope in 1 minute (number of times)	71,0 ± 0,5	71,6 ± 0,4	> 0,01	90,6 ± 0,5	106,2 ± 0,4	< 0,01
Lifting the body from a supine position for 1 min (number of times)	35,0 ± 0,4	33,0 ± 0,3	> 0,01	40,6 ± 0,3	57,2 ± 0,2	< 0,01
Standing long jump (cm)	224,0 ± 0,4	225,0 ± 0,3	> 0,01	228,6 ± 0,3	242,2 ± 0,2	< 0,01
Swimming 50m (min, sec)	66,0 ± 0,4	67,0 ± 0,3	> 0,01	65,6 ± 0,6	46,2 ± 0,2	< 0,01
Run for 100m (s)	14,7 ± 0,14	14,5 ± 0,1	< 0,05	14,3 ± 0,2	13,7 ± 0,2	< 0,01
Pull-up on the lane (number of times)	11,0 ± 1,2	11,4 ± 1,1	> 0,01	11,0 ± 1,1	14,8 ± 1,2	< 0,01
Run for 3000 m (s)	246 ± 4,1	248 ± 4,0	> 0,05	244 ± 5,1	234 ± 4,2	< 0,01
Tilt forward from a standing position with straight legs on a gymnastic bench (cm)	8 ± 0,4	7 ± 0,3	> 0,01	9,6 ± 0,4	13 ± 0,2	< 0,01
Running long jump (cm)	355 ± 0,14	355,5 ± 0,1	< 0,05	359,3 ± 0,2	370,7 ± 0,2	< 0,01
Throwing a sports projectile weighing 700 g (m)	33 ± 1,2	33,4 ± 1,1	> 0,01	37 ± 1,1	38 ± 1,2	< 0,01
Determination of general endurance (step test)	67,6 ± 0,6	67 ± 0,5	> 0,01	72,2 ± 0,3	81,2 ± 0,2	< 0,01
Assessment of static balance. (Romberg test on the floor (sec.))	14,7 ± 0,14	14,5 ± 0,1	< 0,05	15 ± 0,2	15 ± 0,2	< 0,01
Strength Endurance (Juhash Test)	216 ± 4,1	218 ± 4,0	> 0,05	228 ± 3,1	231± 3,2	< 0,01
Jumps on one (jogging) leg 20 m (sec.)	5,8 ± 0,4	5,7 ± 0,3	> 0,01	5,6 ± 0,4	4,9 ± 0,2	< 0,01

So, in the standard shuttle run of 10 x 10 meters, the performance of the groups at the end of the experiment differs by 1.4 seconds, but if we analyze the data before and after the experiment, then the improvement in the control group was only 0.4 seconds, and in the experimental group by 1. 8 seconds.

In the norm, flexion and extension of the arms, in the control group, the improvement was 4.6 times, and in the experimental group by 10.6 times. The difference in the fulfillment of the standard at the end of the experiment between the control and experimental groups is 5.6 times.

In the norm of jumping rope in 1 minute, the performance of the groups at the end of the experiment differed by 15.6 times, at the end of the experiment, the improvement in the control group was 19.6 times, and in the experimental group 34.6 times.

In the norm, lifting the torso from a supine position in 1 minute, the indices of the groups at the end of the experiment differ by 16.6 times, at the end of the experiment, the improvement in the control group was 5.6 times, and in the experimental group 24.2 times.

In the standard long jump from the spot, the indicators of the groups at the end of the experiment differ by 13.6 cm, at the end of the experiment, the improvement in the control group was 4.6 cm, and in the experimental group it was 17.2 cm.

In the standard swimming of 50 meters, the performance of the groups at the end of the experiment differed by 19.4 seconds, at the end of the experiment, the improvement in the control group was 0.4 seconds, and in the experimental group 20.8 seconds.

In the standard run for 100 meters, the performance of the groups at the end of the experiment differs by 0.6 seconds, at the end of the experiment, the improvement in the control group was 0.4 seconds, and in the experimental group 0.8 seconds.

In the standard pull-ups on the crossbar, the indicators of the groups at the end of the experiment differ by 3.8 times, at the end of the experiment, there was no improvement in the control group, and 3.4 times in the experimental group.

In the standard run for 3000 m, the performance of the groups at the end of the experiment differs by 10 seconds, at the end of the experiment, the improvement in the control group was 2 seconds, and in the experimental group 14 seconds.

In the norm, the forward bend from a standing position with straight legs on the gymnastic bench, the indicators of the groups at the end of the experiment differ by 3.4 cm, at the end of the experiment, the improvement in the control group was 1.6 cm, and in the experimental group it was 6 cm.

In the standard long jump with a run, the performance of the groups at the end of the experiment differed by 10.7 cm, at the end of the experiment, the improvement in the control group was 4.3 cm, and in the experimental group it was 15.2 cm.

In the norm of throwing a sports projectile weighing 700 g, the indicators of the groups at the end of the experiment differ by 1 meter, at the end of the experiment, the improvement in the control group was 4 meters, and in the experimental group 4.6 meters.

In the standard definition of general endurance, the indicators of the groups at the end of the experiment differ by 9 units, at the end of the experiment, the improvement in the control group was 4.6 units, and in the experimental group it was 14.2 units.

In the standard assessment of static balance (Romberg test on the floor) at the end of the experiment, the improvement in the control group was 0.3 seconds, and in the experimental group 0.5 seconds.

In the normative strength endurance (Juhash test), the performance of the groups at the end of the experiment differed by 3 units, at the end of the experiment, the improvement in the control group was 12 units, and in the experimental group 13 units.

In the standard jumps on one (jogging) leg of 20 meters, the performance of the groups at the end of the experiment differs by 0.7 seconds, at the end of the experiment, the improvement in the control group was 0.2 seconds, and in the experimental group 0.8 seconds.

Thus, as a result of the analysis of physical fitness data, it was found that the experimental block system of professionally applied physical training with the use of swimming means has a positive effect on the level of development of professionally significant physical qualities and motor skills. In the fulfillment of most of the control standards, the students of the experimental group surpassed the subjects of the control group in terms of special physical fitness.

CONCLUSION

Analysis of the features of the content of the professional activity of a specialist in the “Aquaculture” profile made it possible to establish the basic requirements for the leading physical qualities of a specialist necessary for the successful implementation of professional activities: speed and accuracy of movements, stability and switching of attention, general and physical endurance, strength, agility and coordination of movements, hardness organism; attention, the formation of skills and abilities of driving water transport, the use of physical exercises to maintain and improve performance. In the process of experimental verification of the block system of professional-applied physical training of students of the "Aquaculture" profile, including means of swimming training, aimed at reducing the negative effects of the environment and maintaining health in the process of further work, the formation of students' motivation for continuous physical education and health-improving activities. It is proved that the block system and methodology of conducting classes in professional-applied physical training with the directed use of swimming facilities can be recommended for higher educational institutions that train specialists of this profile.

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