Implementation of additional educational programs for schoolchildren in swimming training

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Abstract

Objective of the study is to experimentally substantiate the optimal set of special sports swimming exercises for teaching schoolchildren to swim as part of an additional general education program.

Methods and structure of the study. The following research methods were used to solve the problems such as: theoretical analysis and summarization of literary sources, interviews, pedagogical observation, and pedagogical experiments.

Results and conclusions. Effective exercises and their sequence of application in swimming instruction have been identified. The proposed set of exercises allows improving physical fitness and strengthening the health of schoolchildren studying under an additional general education program. During classes, the time required to master basic swimming skills is significantly reduced, and correct swimming technique is established, which allows students to move on to more complex skills in a short period of time.

Keywords: *general development programs, general education programs, sports swimming, efficiency.*

Introduction. Additional education is a type of education that is aimed at comprehensively meeting the educational needs of a person in intellectual, spiritual, moral, physical and (or) professional development and is not accompanied by an increase in the level of education [3]. One of the types of additional education in accordance with Federal Law No. 273-FZ dated December 29, 2012 "On Education in the Russian Federation" is additional general education general development programs, which are implemented, among other things, for children.

The additional general education general development program of physical culture and sports orientation in swimming is aimed at improving the swimming skills of students, increasing athletic performance. The goals of the program are also: introducing students to regular physical education and sports, comprehensive physical development of students, formation of the need for systematic physical education and sports, health promotion, initiation into a healthy lifestyle, education of discipline, socialization of personality, development of strong-willed qualities, determination to achieve goals [1]. The program includes: general physical training, special physical training, technical training, tactical training. In the course of classes, work is underway on the moral and volitional training of students. The program focuses on the use of a wide range of exercises that contribute to the formation of a physically active personality. At the same time, there is a need to modernize additional programs, including through the development of new techniques aimed at maximizing the realization of students' motor skills. The developed methods should lead to positive dynamics in the development of physical, moral and volitional qualities of the personality of students, the development of a stable interest and conscious attitude to swimming, and the improvement of athletic performance [2].

The relevance of this work is justified by the need to develop an effective set of special exercises for sports

swimming in order to improve athletic performance among schoolchildren engaged in an additional general educational program.

Objective of the study is to experimentally substantiate the optimal set of special sports swimming exercises for teaching schoolchildren to swim as part of an additional general education program.

Object of research: a set of special sports swimming exercises.

The subject of the research is the process of teaching swimming to schoolchildren according to the program of additional general development education using modern sports swimming exercises.

The objectives of the study are to identify the most effective special swimming exercises that allow improving the level of physical fitness of schoolchildren studying in the additional general education general development program of physical culture and sports orientation in swimming; to conduct an experiment and evaluate its practical significance for solving the goals of the additional general development program in swimming.

Methods and structure of the study. The organization of research work was carried out in three stages. When choosing research methods, it was crucial that they provided sufficient infor-

Table 1.Summary results based on the results of three conducted cross-sections by groups

I Well-floating							
n/a	**Surname and initials**	**Entrance control crawl**	**1st cut 100 m crawl**	**2nd cut 100m crawl**	**Entrance control breaststroke**	**1st cut 100m breast stroke**	**2 nd cut 100 m breast stroke**
1	Belous A.A.	1.55	1.55	1.54	2.26	2.26	2.26
2	Golikov Yu.K.	2.00	1.59	2.00	2.30	2.30	2.28
3	Kakotkin M.V.	2.20	2.18	2.16	2.29	2.29	2.29
4	Lyashenko D.A.	1.58	1.58	1.57	2.19	2.19	2.20
5	Menshikov D.O.	2.06	2.06	2.06	2.25	2.25	2.25
6	Negreev N.M.	2.03	2.03	2.03	2.20	2.20	2.18
7	Solopov L.R.	2.02	2.02	2.01	2.30	2.30	2.28
8	Troyan A.A.	2.05	2.05	2.05	2.25	2.29	2.25
9	Udalov S.R.	2.02	2.03	2.04	2.28	2.28	2.28
10	Shilchikov A.D.	1.59	2.00	2.01	2.24	2.24	2.24
The total time of the group		20.30	20.29	20.27	24.16	24.20	24.11
Average group time		2.03,0	2.03,0	2.02,7	2.25,6	2.26,0	2.25,1
II Weakly floating							
1	Grebenkov A.E.	3.00	2.50	2.38	3.40	3.05	2.59
2	Zhuravlev V.A.	2.48	2.40	2.32	3.05	2.51	2.48
3	Katko N.A.	3.33	3.20	3.08	3.30	3.13	3.01
4	Kostyukovich S.V.	3.00	2.52	2.43	3.40	3.30	3.18
5	Lavrinenko D.S.	2.33	2.30	2.25	3.10	2.56	2.50
6	Miroshnichenko A.V.	2.45	2.29	2.22	3.20	3.11	2.59
7	Parshutkin V.A.	2.40	2.38	2.28	3.17	2.51	2.49
8	Pashkov A.A.	3.01	2.34	2.26	3.08	2.57	2.52
9	Pidpurny V.O.	3.50	2.54	2.46	3.35	3.26	3.14
10	Starostin N.Y.	3.00	2.42	2.33	3.14	3.06	2.58
The total time of the group		30.10	27,29	25.51	36.03	31.06	29.48
Average group time		3.01,0	2,44.9	2.35,1	3.36,3	3.06,6	2.58,8

mation about the effectiveness of the developed complex.

A survey in the form of a conversation. During the survey, information about the level of athletic fitness, swimming skills, as well as a number of demographic characteristics that should have been taken into account when organizing and conducting this study was previously clarified. During the study, 20 people participating in the experiment were interviewed.

Pedagogical supervision was applied throughout the work. The method of pedagogical observation was used to study the effectiveness of the proposed sports swimming exercises. The control tests were conducted in order to study changes in the level of development of physical qualities in schoolchildren enrolled in the additional education program, when the developed complex of sports swimming exercises was included in the training process. The pedagogical experiment consisted in the practical testing of the developed complex of special exercises for sports swimming.

Results of the study and discussion. 10th grade students were selected to conduct the experiment, as the standards for swimming 100 m freestyle and 100 m breaststroke begin to be passed from the 10th grade. According to Federal Law No. 329 of 04.12.2007 No. 329-FZ "On Physical Culture and Sports in the Russian Federation", and the amendments made to it on 25.06.2015, namely in Article 2, paragraph 2.1 on the All-Russian Sports Complex "Ready for Labor and Defense" (TRP), swimming standards are issued for passing the TRP standards.

A survey and conversation were conducted in the classroom, according to the results of which it is possible to draw an initial conclusion about the moral and psychological readiness of students for swimming. After conducting a conversation and survey, an entrance control was conducted in the classroom, which made it possible to accurately identify those who are able to perform swimming exercises rated "excellent" and "good", and those who have certain difficulties performing these exercises (Table 1).

At the second stage of the experimental study, the group was divided into two groups, in one of which swimming classes were conducted according to the schedule established by the work program, in the other the exercises described in the work were used in the classes. A 100m breaststroke and 100m breaststroke swimming test was conducted every 10 days.

The experimental study was conducted using special sports swimming exercises. During the experiment, the most effective exercises on land were identified, contributing to the development of physical qualities and the formation of swimming techniques, which is very important throughout swimming training, and especially at the initial stage. Special exercises on land: exercises with a rubber band; exercises with a partner; exercises with a stuffed ball (3kg ball); exercises with loops TRX; TRX push-ups; standing deadlift; upper deadlift; TRX squats; exercises on simulators. The most effective and accessible special exercises on the water and the sequence of their application were also identified for this category of subjects.

After the first 10 days of the experiment, the 1st section was performed. On the 20th day of the experiment, the 2nd slice was performed. The results of sections 1 and 2 are presented in Table 1.

As can be seen from Table 1, during the experiment, the time of the "Weak swimmers" group improved by an average of 25 seconds in the 100 m crawl and 15 seconds in the 100 m breaststroke. This is 8-14% of the average time of the group during the final cut, while the results of the "Good swimmers" group changed by no more than 0.2%.

Table 2 shows the dynamics of the results of the "Weakly floating" group from the beginning of the experiment to the moment of its completion. The results with a high degree of reliability ($p<0.05$) confirm the effectiveness of the proposed set of exercises for teaching swimming to schoolchildren according to an additional general educational program.

Table 2. Dynamics of indicators of subjects in the group of weakly floating

№	Indicators	A group of weakly floating						
		Before			After			p
		$\bar{x}_1$	±	m_1	$\bar{x}_2$	±	m_2	
1	100 m crawl	181,00	±	7,92	156,10	±	4,56	≤0,05
2	100 m breaststroke	201,90	±	4,45	178,80	±	3,41	≤0,01

During the statistical processing of the results obtained, we obtained positive dynamics of results in swimming at 100 m crawl t = 2.725, which corresponds to a significance level of $p < 0.05$, and in swimming at 100 m breaststroke t = 4.121, which corresponds to a significance level of $p<0.01$. The results obtained indicate significant shifts in the level of swimming fitness of students, with whom classes on the experimental complex were conducted.

Conclusions. The most effective exercises and the sequence of their application in teaching swimming have been identified. The proposed set of exercises makes it possible to improve physical fitness and strengthen the health of schoolchildren enrolled in an additional general educational program. When conducting classes using the proposed complex, the time required to master the initial swimming training skills is significantly reduced, as well as the formation of proper swimming techniques, which allows you to move on to the formation of more complex skills in a short time.

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