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## PECULIARITIES OF FORMATION SWIMMING TRAINING PROCESS OF JUNIOR SCHOOLCHILDREN IN A SUMMER CAMP

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### Abstracts

Analysis of scientific researches show the importance of finding and developing new methodological approaches to initial swimming training that would take into account all the features and possibilities of modern camp shifts, would significantly improve the quality and effectiveness of swimming training in summer health camps. The article analyzes main requirements that need to be taken into account in initial swimming training. Reasons which complicate the process of swimming of junior schoolchildren, cause discomfort, fear and stressful situation are determined. Structure and content of swimming training in a summer health camp for junior schoolchildren are developed in the article. Swimming technique with the use of respiratory gymnastics by A.N. Strelnikova was developed on the basis of analysis of scientific literature, generalization of practical experience of leading experts and obtained data with elements of aqua aerobics, exercises with snorkeling and rescue exercises. Organizational and methodological conditions of teaching swimming of junior schoolchildren in the summer health camp «Lastochka» in an open water bodies are given in comparison with classical technique by Nabatnikova M. Experimental methodology of swimming training contains teaching material, methods and tools, including technical devices: a series of lessons «Swimming as the most important human skill», lessons with elements of training (fighting phobia related to open water bodies), the game program «I am a lifeguard». The study reveals results of ability to swim of junior schoolchildren age who took part in training swimming sessions on the basis of the summer camp «Lastochka» in Skadovsk in 2016 during the month of August. The results of introduction of experimental method in the swimming training of the summer health camp positively influenced the ability to swim. Comprehensive study of swimming exercises gave children the opportunity to gain new skills and knowledge in rescuing drowning men, which, to a large extent, contribute to safety of children on the water.

**Key words:** swimming, summer camp, mass swimming.

**Ольга Ображей. Особливості побудови процесу навчання плавання молодших школярів у літньому оздоровчому таборі.** Аналіз наукових досліджень свідчать про важливість пошуку та розробки нових методичних підходів до початкового навчання плавання, які б враховували всі особливості та можливості сучасної табірної зміни, давали змогу суттєво підвищити якість й ефективність навчання плавання в літніх оздоровчих таборах. У статті проаналізовано основні вимоги, які потрібно враховувати під час початкового навчання плавання. Визначено причини, які ускладнюють процес навчання плавання дітей молодшого шкільного віку, викликають дискомфорт, страх і стресову ситуацію. Також удосконалено структуру та зміст програми циклу зміни занять оздоровчим плаванням дітей молодшого шкільного віку в оздоровчому таборі. На підставі аналізу наукової літератури, узагальнення досвіду практичної роботи провідних фахівців, а також отриманих даних у ході дослідження розроблено та впроваджено методику занять плаванням із використанням дихальної гімнастики А. Н. Стрельнікової, елементами аквааеробіки, вправ із снорклинг і рятувальних вправ. Наведено організаційно-методичні умови навчання плавання молодших школярів у літньому оздоровчому таборі «Ластівка» на відкритій водоймі, порівняно з класичною методикою за М. Набатніковою. Експериментальна методика навчання плавання містить навчальний матеріал, методи й засоби, включаючи технічні пристосування: цикл занять «Плавання – як найважливіша навичка людини», заняття з елементами тренінгу (боротьба з фобіями, що пов'язані з відкритими водоймами), ігрова програма «Я-рятувальник». У роботі наведено результати рівня вміння плавати дітей молодшого шкільного віку, які перебували на навчально-тренувальних заняттях із плавання на базі літнього оздоровчого табору «Ластівка» у м. Скадовськ у 2016 р. протягом серпня-місяця. Упровадження експериментальної методики в навчальний процес літнього оздоровчого табору позитивно вплинула на вміння плавати. Усебічне вивчення плавальних вправ дало можливість дітям отримати нові вміння, навички й знання з порятунком потопаючих, які значною мірою сприяють безпеці перебування дітей на воді.

**Ключові слова:** плавання, літній оздоровчий табір, масове навчання плаванню.

**Ольга Ображей. Особенности построения процесса обучения плаванию младших школьников в летнем оздоровительном лагере.** Анализ научных исследований свидетельствуют о важности поиска и разработки новых методических подходов к начальному обучению плаванию, которые бы учитывали все особенности и возможности современной лагерной смены, позволяли существенно повысить качество и эффективность обучения плаванию в летних оздоровительных лагерях. В статье проанализированы основные требования, которые необходимо учитывать при начальном обучении плаванию. Определены причины, которые затрудняют процесс обучения плаванию детей младшего школьного возраста, вызывают дискомфорт, страх и стрессовую ситуацию. Также усовершенствованы структура и содержание программы цикла смены занятий оздоровительным плаванием детей младшего школьного возраста в оздоровительном лагере. На основании анализа научной литературы, обобщение опыта практической работы ведущих специалистов, а также полученных данных в ходе исследования, была разработана и внедрена методика занятий плаванием с использованием дыхательной гимнастики А. Н. Стрельникова, элементами аквааэробики, упражнений с snorkлинг и спасательных упражнений. Приведены организационно-методические условия обучения плаванию младших школьников в летнем оздоровительном лагере «Ласточка» на открытом водоеме, по сравнению с классической методикой по М. Набатникова. Экспериментальная методика обучения плаванию содержит учебный материал, методы и средства, включая технические приспособления: цикл занятий «Плавание – как самый важный навык человека», занятия с элементами тренинга (борьба с фобиями, связанными с открытыми водоемами), игровая программа «Я-спасатель». В работе приведены результаты уровня умения плавать детей младшего школьного возраста, находившихся на учебно-тренировочных занятиях по плаванию на базе летнего оздоровительного лагеря «Ласточка» в г. Скадовск в 2016 г. в течение августа месяца. Внедрение экспериментальной методики в учебный процесс летнего оздоровительного лагеря положительно повлияла на умение плавать. Всестороннее изучение плавательных упражнений дало возможность детям получить новые умения, навыки и знания спасения утопающих, которые в значительной степени способствуют безопасности пребывания детей на воде.

**Ключевые слова:** плавание, летний оздоровительный лагерь, массовое обучение плаванию.

**Topicality.** Under conditions of dynamics of modern economic and social processes there is more workload on junior schoolchildren, who need complete rest. Problem of health improvement and recreation of children is effectively solved by children's health camps. However, in this period it is important not only organization of children's leisure, but also organization of swimming training of junior schoolchildren at a camp [1].

The problems of organization of classes and methods of teaching swimming at summer health camps are devoted many works of such scientists as S.V. Belits-Geitman, N. Zh. Bulhakova, S. M. Voitsekhovsky, V. S. Vasiliev, S. M. Gordon, T. I. Osokina, Z. P. Firsov, V. N. Pyzhov, S. M. Klimakova and others.

However, despite this, it is not possible to solve the problem of teaching children to swim fully. Research data in certain regions of Ukraine shows the number of students who cannot swim at the age of 8–10 years old – 40-50%, high school students – 40-42%, young men of military age – over 50%. There are more than 90% of children of younger age who cannot swim.

The main reasons of inability to swim experts call lack of stationary basins, lack of funds, lack of swimming coaching specialists, etc [1; 3; 6].

Today, it is important to organize swimming training of children using as efficiently as possible the time they spend in a summer health camp [2; 4; 6; 7].

Equally important is search and development of new methodological approaches to initial swimming training that would take into account all features and possibilities of modern camp shifts, would allow to improve significantly the quality and effectiveness of swimming training in summer health camps. With that in mind, our research is relevant.

**The purpose of the study** is to develop structure and content of swimming training in a summer health camp and to investigate the impact of experimental techniques on ability to swim of junior schoolchildren.

**Materials and methods.** The study was carried out in educational and training sessions in swimming at a summer camp «Lastochka» in Skadovsk in 2016 during the month of August. The shift lasted 21 days. The study involved 24 people who could not swim aged 8-9 years, of which 13 girls and 11 boys. In order to determine individual characteristics, testing of physical state indicators of children was used.

Preliminary analysis allowed revealing insignificant differences between boys and girls at this age by level of physical qualities and level of swimming readiness. That allowed uniting all children into one group. Swimming sessions were conducted daily except day of children's arrival and the last day of stay in the «Lastochka» health camp since 10.00 to 12.00 in the Black Sea. Particular attention was paid to issues of

safety and prevention of children injuries. Medical control was carried out by medical workers of the summer camp.

To determine the assessment of skill swimming level, children's readiness at the beginning and at the end of the experiment, we have developed a system of control exercises and a five-point assessment system:

- **Fear of water:** 1-a child refuses to enter the water; 2-enters the water after a long conversation; 3- enters the water with a coach; 4- independently enters, but holds on a side; 5- not afraid of water, bravely enters the water, playing.

- **Water face immersion:** 1- do not immerse the face (refuses); 2 - immerses after the explanation and persuasion of a coach; 3- immerses only the face (eyes are closed); 4-immerses the head (eyes are closed); 5 - immerses the head deep, dives, eyes are open;

- **Water Squats:** 1- refuses; 2- squats with the coach (water level to the chest); 3- squats alone (water level around the neck); 4- squats with full immersion of the head; eyes are closed; 5- self-crouches, dives;

- **Jumping into water:** 1-refuses to make a «downturn from the side»; 2- does a downturn from the side without letting go off hands; 3- makes a downturn with the coach; 4-independently makes a downturn from the side; 5- jumps independently with repulsion from the side;

- **Breathing delay in water:** 1-delayed breathing only on land (up to 10 seconds); 2-delayed breathing only on land (up to 15-20 sec.); 3- delayed breathing in water (up to 5 sec.); 4- delayed breathing up to 10 seconds; 5- delayed breathing more than 15 seconds;

- **Ability to perform an exercise** 1- refuse to perform; 2- the exercise fulfillment is «uncoordinated»; 3- the exercise «Asterisk» with lowered legs (up to 5 seconds); 4- the exercise is done correctly (up to 10 seconds); 5- the exercise is done correctly for more than 15 seconds;

- **Ability to push off and slip:** 1- inability grouping together at the turning wall; there is no slip; 2- a bad grouping; there is weakly non-directed repulsion; 3- slip after repulsion to 2 m; 4 - slip with correct position of trunk after proper repulsion, repulsion to 4 m.; 5- sliding with correct position of trunk after correct repulsion of more than 5m;

- **Ability to slip and footwork:** 1. slipping without work of legs; 2- sliding with footwork as crawl stroke with fluctuations of trunk; 3- proper sliding with footwork as crawl stroke on chest up to 5 m; 4- proper sliding with footwork of legs as crawl stroke on chest up to 8m; 5- proper sliding to 12 m;

- **Ability to slip and work with hands:** 1- slipping without hands; 2- slipping with hands as crawl stroke, with excessive body vibrations; 3- proper execution of slides with work of hands as crawl stroke on chest up to 5 m; 4- proper sliding with hands up to 8m; 5- proper sliding with work of hands up to 12 m;

- **Ability to swim in coordination:** 1- refusal to perform an exercise; 2 - inability to swim in coordination; 3 – indistinct implementation of swimming in coordination and with stops; 4 - swimming in coordination up to 15 m; 5- swimming in coordination of more than 15 m.

Obtained results were included into individual protocols and processed using methods of mathematical statistics.

**The results of the study.** The realization of physical culture and recreation activities potential of a summer camp is possible only on basis of its accumulated experience, knowledge, interesting ideas, skills and abilities to identify and apply innovative forms and methods, and thus improve approaches to swimming training children [1].

We analyzed main requirements that need to be considered during the initial training of swimming, which are shown in table 1.

Methods of initial swimming training for children by Bulgakova M. Zh., Gurfinkel A.I., Klimakova S.M., Nabatnikova M.V. and others indicate special requirements for carrying out swimming lessons in open water bodies [1; 2; 4; 5; 6; 7; 8].

It is recommended to have swimming baths and swimming training, as well as improvement techniques between 10 a.m. and 12 at noon and from 5 p.m. to 7 p.m. in summer camps. General and special exercises are included in the morning gymnastics of the camp beforehand. This leads to basics of mastering swimming techniques. Subsequently, complexes of physical exercises on the land are performed by children at lessons before exercises in water. It is advisable to use auxiliary equipment: wooden or foam plastic boards, rubber inflatable floats and toys, swimming supporting belts, rubber balls, a whistle.[5]. The best temperature is 23 °C (see Table 1). If children begin to freeze, you should stop the lessons immediately and take a break.

Table 1

**Basic requirements that must be fulfilled during initial swimming training**

Authors	Number of children in the group	Depth of water (cm)	Flow rate m / min	Area for swimming	t° of water in reservoirs (° C)	Air t° (°C)	Duration of classes	
							At the beginning (min.)	At the end (min)
Bulgakova N.	10	120	10	25m x15m	20-25	22-26	5	30-35
Vasilev V.S.	10	90-130	≤10	6m x15m	21-23	23-25	5-7	25-30
Nabatnikova M.	10-12	90-100	≤10	25m x15m	20 i >	25	3	30
Davydov V. Yu	10-15	90 i >	10	3m x 12m	22-25	23-25	5	30
Kryvodud T. Ye	≤10	≤130	10	25m x10m	20-22	20 i >	3-5	25
Zhelezny D. V.		90	10	4m x12m	20-24	22 i >	3-5	30
Gurfinkel A.	8-10	100	10	12mx15m	21-25	25	3	25

Most scientists, like Nabatnikova M.V., Bulgakova N. Z., Gurfinkel A.I., Klimakova S. M. and others declare that during 21 day of staying in a summer camp, children of 10-12 years old and 13-15 years old who cannot swim, should learn how to swim crawl without overarm swimming, and children who are able to swim – the crawl stroke. As a result of swimming lessons, children aged 8-9 should learn to enter into the water without fear and feel confident in the water, do exercises in the water and learn to crawl stroke without overarm swimming [1; 4; 8].

Learning swimming in open water bodies has both positive and negative aspects. It is impossible not to pay attention to a large percentage of children who expect danger during swimming training in open water bodies due to the increased fear of water (often after the occurrence in the past of a critical situation in water with independent attempts to learn to swim). As you know, danger is interconnection or threat of something dangerous. Reaction to danger, according to special literature is manifested in anxiety and increased activity of the nervous system [3].

It is necessary to predict the reasons that complicate the learning process, cause discomfort, fear and stressful situation: - open environment (can cause insecurity); - lack of ability to securely fix; - uncomfortable weather conditions (cool temperature of reservoir, strong wind, precipitation, excitement); - uncomfortable bottom for entering the water barefoot (mud, algae, pebbles, coral deposits, contamination by household and other garbage); - large number of strangers on the shore and in the water; - a fairly sharp lowering of the bottom, lack of shallow water; - possible undesirable underwater inhabitants; - strong flow; - lack of comfortable place for changing clothes, toilet; - unclear water, pollution; - strong noise (motor boats, loud music, etc.) [3].

A program was made up based on the analysis of scientific literature, generalization of practical experience and approval of the camp administration.

Table 2 shows Structure and content of swimming lessons for junior schoolchildren is demonstrated in Table 2.

Table 2

**Program structure and content of cycle swimming training for junior schoolchildren in a children's recreation camp**

Purpose of event	Name of event	Number of classes and their duration
<b>Organizational period</b>		
Education of persistent interest for systematic swimming activities. Talk about the benefits of swimming, and get acquainted with the professions that require the ability to swim. Educating children with special knowledge in the field of competitive swimming.	Series of conversations on the theme «Swimming – as the most important skill of man»	3 lessons (45min)

End of the Table 2

<b>Basic period</b>		
Learn to manage own emotions in crisis situations. Learn to prepare properly for situations of high emotional pressure. Increase level of confidence in own abilities. Learn to overcome fears through special exercises. Form an individual system of work with fears based on the proposed training techniques.	Lessons with elements of training (fight against phobias associated with open water bodies.)	8 lessons (45min)
<b>Final period</b>		
Check the effectiveness of the training method.	Game program «I am a lifeguard».	1 lesson (1 hour 30 min)

Swimming technique with the use of respiratory gymnastics by A. N. Strelnikova was developed on the basis of analysis of scientific literature, generalization of practical experience of leading experts and obtained data. Feature and important advantage of respiratory exercises of A. N. Strelnikova is the use of forced inhalation and involvement in the process of breathing respiratory muscles –

diaphragm. Respiratory gymnastics was to practice short, sharp, noisy breath through the nose at a rate of approximately 3 breaths in 2 seconds followed by a completely passive exhalation through the mouth. Movements that caused compression of the chest were performed simultaneously with the inhalation. Gymnastics was carried out in the preparatory part of swimming lessons and included simple breathing exercises. Respiratory gymnastics began with three basic exercises: «Palms»; «Epaulettes»; «Pump». Every day one exercise was added: «Cat», «Embrace your shoulders», «Big pendulum», «Turns of the head», «Ears», «Hover» [9].

Elements of aqua aerobics also were included in the preparatory part of the lesson. Aqua aerobics included running and walking in water, various kinds of dancing, jumping, special stretching exercises, games and many other types of exercises and motor activities in the aquatic environment.

Main movements in aqua aerobics were used from different starting positions: standing, semi-squat, with a movable and stationary support, on a small (30 cm) depth, with unsupported position in a deep place (60 cm), with equipment (objects, technical means) and without them, with support and without partner's support.

Snorkeling exercises have been used in the main part of the lesson which contributed to faster and better performance of breathing exercises, respiratory depression, movements of the legs crawl and dolphin, diving, etc.

Familiarization with rescue exercises was in the final part. When performing rescue exercises, children received various applied skills that may be useful to them in later life. Comprehensive study of swimming skills enables children to acquire new skills and knowledge in salvation. These skills affect the safety of children's staying in the water. Rescue equipment (lifebuoys, balls, hooks, «cats», throwing ropes, life belts, life jackets, bibs, etc.) was used for more effective learning of rescue skills. [4; 8].

Exercises of a different nature were used adequate to the level of preparedness of those who are engaged. Workload dosed due to changes in the amplitude of movements, tempo, rhythm, coordination complexity and number of repetitions. The experimental method is designed for 18 lessons, every day for 45 minutes.

Table 3 presents the organizational and methodological conditions for teaching swimming junior schoolchildren in the summer recreation camp «Lastochka» in an open water compared with the classical (according to Nabatnikova M.).

It is known that the quality of mastering swimming skills in most children remains rather low (Antropova M.V., Kuznetsova Z.I., Salnikova G.N.), this is due to a large number of factors that influence the effectiveness of learning (Afanasyev V. Z.; Bakuniyene K. F.; Belokovsky V. V.; Yevtushova L. F.). One of the most important factors that ensure the success of swimming training is age characteristics of children of junior school age, a leading activity (game). Methodology of swimming training should contain teaching material, methods and tools, including technical devices that will allow them to find new forms of employment, to increase their emotions and to raise children's interest to them. In addition, it will solve the

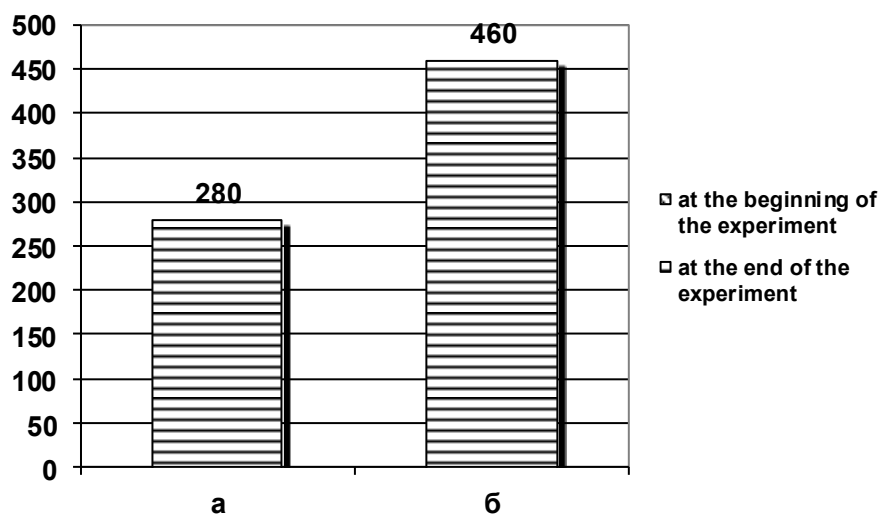
problem of comprehensive development of personality junior schoolchild (good physical qualities, healthy mental life and development) [7]. In connection with this, a series of lessons was devised «Swimming as the most important human skill», lessons with elements of training (fighting phobia related to open water bodies), the game program «I am a lifeguard». High emotionality, musical support, a large variety of interesting exercises and elements contribute to the development of swimming readiness, development of physical qualities, creative and mental abilities of junior schoolchildren [5; 6; 7].

Table 3

**Conditions for carrying out lessons and swimming training for junior schoolchildren**

Conditions for conducting swimming training lessons	Methodology	
	Experimental technique	by Nabatnikova M.
Total number of lessons (days)	18	15
Number of lessons per week (days)	7	7
Duration of the lesson at the beginning of the training (min)	45	5
Duration at the end (min)		35-40
Innovation	Use of breathing gymnastics by Strelnikova and elements of aqua aerobics in the preparatory part of the lesson. Snorkeling exercises in the main part. Familiarization with rescue exercises in the final part.	Application of a game method

The study has shown that introduction of experimental method in lessons of junior schoolchildren has a positive impact on their ability to swim.



**Fig. 1.** Total indicator characterizing the ability of children to swim at the beginning and at the end of the experiment

At the beginning of the experiment, the group coped up to 280 points, and after a series of lessons we have conducted a similar test which was a part of the game program «I am a lifeguard». The results proved the possibility of teaching children in open water bodies. All children performed tests with a positive result. The best performances of control exercises which children managed to handle were: overcoming fear of water – 46 points, and the ability to swim in coordination – 48 points.

**Conclusions and prospects for further research:** The results of introduction of experimental method in the swimming training of the summer health camp positively influenced the ability to swim. Comprehensive study of swimming exercises gave children the opportunity to gain new skills and knowledge in rescuing drowning men, which, to a large extent, contribute to safety of children on the water.

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