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STUDENT SWIMMING TEACHING TECHNOLOGY BASED ON THE USE OF THE GAME METHOD

The article shows the possibility of using the game method in swimming as a non-traditional type of motor activity in the educational process of physical education of female students; theoretically substantiated pedagogical technology of the educational process of physical education of female students, based on the use of game complex forms of classes (game exercises on land and in water); a new approach to planning the content and organization of the educational process of physical education in higher education institutions was implemented on the basis of the game method; developed a game method that allows you to quickly master and improve motor skills of swimming. Full development of personality and self-realization in life requires not only intellectual and creative abilities, acquired professional knowledge and practical experience, but also a sufficient level of psychophysical condition, including physical health, mental and physical performance, psycho-emotional stability. Exercise contributes to the formation of a harmoniously developed personality and psychophysical training of students. The use of popular types of physical culture and health activities, namely swimming can not only provide a sufficient level of physical activity, but also have a positive effect on the psychophysical condition of student youth. Lack of physical activity has a particularly negative effect on the health of women, in particular, female students. Throughout the entire period of study in higher education institutions, female students have a low level of physical development, motor and functional fitness. This situation belongs, first of all, to pedagogical universities, where the vast majority of students are girls.

Key words: swimming, students, game method, motor activity, physical fitness.

Дакал Н. А. Технологія навчання плаванню студенток на основі використання ігрового методу. В статті показано можливість використання у освітньому процесі з фізичного виховання студенток ігрового методу у плаванні як нетрадиційного виду рухової активності; теоретично обґрунтовано педагогічну технологію освітнього процесу з фізичного виховання студенток, засновану на застосуванні ігрових комплексних форм занять (ігрові вправи на суші та у воді); на матеріалі ігрового методу здійснено новий підхід до планування змісту та організації освітнього процесу з фізичного виховання у закладах вищої освіти; розроблений ігровий метод, який дозволяє в короткий термін оволодіти та вдосконалювати рухові навички плавання.

Ключові слова: плавання, студентки, ігровий метод, рухова активність, фізична підготовленість.

Formulation of the problem. Radical changes in the life of our society have led to great changes in worldview and ideology, in culture and education. There have been radical changes in the sphere of life, in values. The growth of the values of life, health, active longevity and the realization of human individuality are increasingly seen as criteria for social progress in society.

Studying in higher education institutions is characterized by significant emotional and intellectual stress of basic psychological functions, hypokinesia, the presence of stressful situations. Lack of physical activity has a particularly negative effect on the health of women, in particular, female students. Throughout the entire period of study in higher education institutions, female students have a low level of physical development, motor and functional fitness. This situation belongs, first of all, to pedagogical universities, where the vast majority of students are girls.

Physical culture in higher education institutions is presented as an academic discipline and the most important component of the holistic development of the student's personality, as an important component of the general culture and professional training of student youth throughout the period of study.

In the conditions of qualitative transformation of all aspects of society, the requirements for the physical fitness of young people necessary for successful future work are growing. The problem of improving the physical education of young people in higher education institutions has been the subject of attention of experts for many years [2].

Analysis of literature sources. Given the low level of motivation of students to exercise, increase morbidity and change the status of physical education in higher education, there is a need to strengthen the sectional work based on the use of physical exercises that have both health and applied value [5]. According to foreign and domestic scientists, exercise in water improves the body's cardiorespiratory system, speeds up metabolism, is characterized by high energy power of physical activity, unloads the musculoskeletal system, hardens and enhances immunity (Debbie Lawrence) [7].

According to V. Volkov, swimming provides students with the formation of vital motor skills, the ability to use different styles of swimming, submarine and preparatory exercises, additional technical means for the development of psychophysical qualities [3].

In the scientific works of J. Demina it is indicated [4] that in modern youth a sedentary lifestyle prevails, and as a consequence, there is such a phenomenon as hypodynamia, static overstrain of the musculoskeletal system with simultaneous relaxation of abdominal muscles, leading to various spinal deformities, decreased functioning of the respiratory and circulatory systems, slowing down metabolic processes in the body. At the same time, the student needs a high level of mental capacity, to withstand the effects of strong psychological stimuli, to be able to concentrate and quickly switch attention, to maintain optimal

emotional tone during the day.

Thus, swimming is the optimal type of physical activity for students of higher education institutions. In addition, swimming is popular among students regardless of gender and educational and professional activities [2]. The high variability of the volume and intensity of muscular activity in the process of swimming allows to apply it to students, taking into account their typological features [8].

Presentation of the main material of the study. Currently, there is a search for ways to improve the effectiveness of sports swimming techniques, one of the important areas in this process is to find the optimal ratio of rowing parameters. Specialists [3; 4] note that in order to achieve maximum swimming speed it is necessary to achieve the optimal ratio between the pace and length of rowing, and emphasize that the study of the relationship between maximum speed, pace and length of rowing shows the presence of complex and significantly different for different athletes. As the sportsmanship of swimmers grows, more and more attention is paid to work on increasing the pace with relatively stable indicators of the length of the rowing [5]. However, according to a number of studies on water sports, the relationship between these parameters can vary significantly for different parts of the distance [6].

Full development of personality and self-realization in life requires not only intellectual and creative abilities, acquired professional knowledge and practical experience, but also a sufficient level of psychophysical condition, including physical health, mental and physical performance, psycho-emotional stability. Exercise contributes to the formation of a harmoniously developed personality and psychophysical training of students. The use of popular types of physical culture and health activities, namely swimming can not only provide a sufficient level of physical activity, but also have a positive effect on the psychophysical condition of student youth.

The importance of building the training process of young swimmers based on the typological parameters is noted in many scientific papers on improving swimming techniques [5]. Researchers agree on the need to use different approaches, tools and criteria for assessing the technical and special physical fitness of young swimmers of different ages and sports qualifications, but so far, unfortunately, there is no consensus on the main criteria for dividing athletes into typological groups. The most key methodological bases and priorities of rational sequence of application of exercises within the educational and training process are clarified, as well as favorable age periods for such specification are not defined, effective specific organizational forms for each of typological groups are not specified.

The reform of higher education led to the humanization of pedagogical education, the opening of new specialties, including the humanities, which contributed to the increase of the female contingent in pedagogical universities.

The process of physical education in pedagogical universities is traditional, such types of physical activity as athletics, swimming, wrestling, basketball, volleyball, football are actively developing. With the common tasks and objectives of physical education, its content, organization and methodology should be differentiated, primarily by gender.

The existing infrastructure of physical education of female students in pedagogical institutions of higher education on the basis of traditional provisions of existing organizational and methodological programs does not fully ensure the solution of the main task - effective rehabilitation, education and upbringing of students.

The problem of improving university physical education has been the subject of attention of specialists for many years. In recent years, the content and quality of scientific papers devoted to the study of the effectiveness of the implementation of non-traditional forms, tools and methods of physical activity of student youth has improved.

Thus, there is a need for a radical restructuring of the pedagogical process when working with female students. Research aimed at the development of non-traditional for the university, but quite popular and effective types of physical activity used in the practice of health training of female students is relevant. Including the greatest interest is the gameplay, ie. system of swimming exercises on land and in water are performed in the form of games, which facilitates their development. It is shown that through the game students enter the world of childhood, and easily master the complex coordination of swimming movements. In connection with the above there is a need to develop and scientifically substantiate the technology based on the use of the game method in the educational process of physical education of students of pedagogical universities. This determines the timeliness and relevance of this work ..

Swimming has a positive effect on the central nervous system, normalizes its activity, eliminating excessive excitability and irritability, increasing overall vitality and creating a cheerful, good mood [8]. The cooling effect of water through the appropriate nerve conductors increases metabolic processes and has a beneficial effect on thermoregulatory processes, increasing resistance to cold [3].

Therefore, shifting the emphasis of the training tools used on the purposeful development of endurance and strength abilities has significantly adjusted typological affiliation of the ratio of the number of young swimmers. This suggests that, on the one hand, the importance of the influence of pedagogical components in this process, on the other - the regrouping of swimmers to typological affiliation contains the potential for progress of sporting achievements from the standpoint of their further training activities.

The high-quality implementation of the reform of general education, vocational and higher education raises special requirements for the formation of a modern level of training for physical education teachers. They study at numerous faculties of physical culture (physical education) of pedagogical universities of the countries of the commonwealth of independent states, in which more than 50 thousand students study. In addition, a significant number of them study at related universities - universities, academies and institutes of physical culture and are significantly supplemented by students from technical schools, colleges and schools of the Olympic reserve. An important link in the professional training of qualified teaching staff is to improve the theory and methodology of teaching the special subject "Swimming" on the basis of the accumulated experience of studying it as an educational, sports and pedagogical discipline. In reality, progressive experience is not always introduced into practice, which

naturally reduces the effectiveness and quality of the educational-training process in swimming.

The existing standard programs, manuals and textbooks in their structure resemble the literature of the 50s and 60s, and in terms of their conservative content, they no longer reflect the advanced theory of swimming and the practice of progressive scientists and specialists. The negative phenomena in the state of swimming development are significantly increased by the facts of a significant number of tragic cases: according to UNESCO, more than 350 thousand people suffer disasters on the water every year.

Thus, swimming lessons in higher education have a positive effect on the state of the central nervous system, contribute to the formation of a balanced and strong type of nervous activity. Swimming tones the nervous system, balances the processes of excitation and inhibition, improves blood supply to the brain.

Pleasant associations associated with swimming, maintaining the balance of the body in the water, have a positive effect on the psychophysical state of students, contribute to the formation of a positive emotional background. Swimming helps to overcome fear of water, relieves fatigue, helps with nervous tension and depression, lifts the mood, improves sleep, attention and memory. Regular swimming disciplines and improves willpower.

A significant amount of theoretical and methodological material on the problem of research and its interdisciplinary nature;

a set of research methods adequate to the tasks;

correct mathematical and statistical procedures for processing experimental data and their interpretation.

The following provisions are made for protection:

1. Indicators of self-esteem of students and the dynamics of their health, attitudes to physical education and classes in this subject, during the period of study at a pedagogical university, including analysis and assessment of passive attitude to attending physical education classes and the reasons for such attitudes.

2. Pedagogical technology of the educational process in physical education, based on the use of the game method in teaching swimming to students of pedagogical universities.

3. The effectiveness of the developed technology, implemented in raising the level of: physical development and physical fitness, swimming fitness, differentiated self-esteem, sustained interest in classes, student achievement.

Conclusions. During the period of study at the pedagogical university there is a gradual deterioration of students' health: for example, self-esteem of good health from 1st to 5th year decreases by 6.7%, satisfactory condition - by 5.3%, and assessment poor condition increases by 12.8%; at the same time there is a certain level of indifference to their health (on average - 45.5%).

Analysis of the dynamics of respondents' opinions on the problem of attitude to their health showed that during the study period the change of such indicators from the initial state (1 course) to the final (5th year) is close to the linear law, most deviations of empirical indicators from theoretically calculated functions linear equations are within $\pm 10\%$. This allows you to predict changes in the health of students throughout their studies.

Despite the growing need for physical culture as a means of improving health (on average 85.6% of respondents, the level of desirability - high), physical education classes of their choice are attended by an average of 35.1% (level - below average). Other students (67.9%) are characterized by a passive attitude to such classes. The main reasons for passive attitude, according to respondents are:

a) dissatisfaction with either the content of the classes, with the desire to change it (average score 28.2%, below average), or their construction on the basis of general physical training (average score 26.8%, below average);

b) low interest as a result of lack of motivation (average score 41.6%, level - average).

To improve the physical education of students of pedagogical universities, as well as eliminate the causes of passive attitude to physical education, based on research, developed general conceptual provisions for the formation of innovative technology for teaching swimming to students based on the game method.

Reference

1. Buble T. A. (2018) Methodology of differential education of physicists has the right of the main school scholars with health outcomes: author. dis. ... Cand. ped. Sciences: [special] 13.00.02 "Theory and technique of navchannya (physical culture, bases of health)" / Buble Tetyana Anatoliyivna; Nat. ped. un-t im. M.P.Dragomanova. – Kiev, 19 p.

2. Volkov V.L. (2004) Fundamentals of professional and applied training of student youth: navch. posibnik / V.L. Volkov. - K: Knowledge of Ukraine, 81 p.

3. Dubogay O.D. (1995) Methodology of physical education of students who lead health behind the camp to a special medical group: the head master. / O.D. Dubogay, V.I. Zavatsky, Yu. O. Korop. - Lutsk: Nadstyyrya, - 220 p.

4. Domina Zh. G. (2010) Technique of navchannya has the right to coordinate the directing of the music teachers in the process of physical communication: author. dis. Cand. ped. Sciences: 13.00.02 / Zh. G. Domina. – Kiev: NPU imeni M.P. Dragomanova, - 22 p.

5. Kruchevich T. Yu., Andreeva O. V., Blagii O. L., Sadovskiy O. O. L. Blagiy, O. O. Sadovskiy (2018)// "Molodiy Vcheniy". No. 4.2 (56.2).- S. 24-29.

6. Tymoshenko O. (2016) Yak modernizuvati the national system of physical wickedness? Happy Holy Week / O. Tymoshenko, J. Domina // Osvita: all Ukrainian. thunder-polit. tizh. - 2016. - No. 15 (April 13-20). - S. 6; Osvita. - No. 21/22 (25 grass-1 worm). - S. 6.

7. Lawrence D. (1999)The complete guide to exercise in water / D. Lawrence // A&C Black London, 1999. – P. 15–26.

8. Vicente Banachelo (1995). Hidrogimnastica / Banachelo Vicente. Santos-CER 11035-050 da Praia.-30 p.