
Pedagogical Basis for Increasing the Effectiveness of Physical Upbringing with the Use of Environmental Factors (on the Example of Students)

Ma'rufov Mansurbek Musajonovich

Uzbekistan State University of Physical Education and Sports, Deputy Dean of the multi-sport faculty

Annotation: This article discusses the influence of natural factors of nature, air microflora, climate and weather on the health of athletes, as well as the effectiveness of training. You will also get acquainted with the analytical results of the hygienic aspects of mass sports and physical education, the purposeful and integrated use of hygiene products to maintain, strengthen and improve the sports performance of athletes.

Keywords: nature, natural factors, climate, weather, athletes, health, training, performance, effect, microflora, mass sports, physical education, hygiene, activity, means, result.

In the world, at the stage of modern development of science, technology and technology, much attention is paid to improving scientific and practical innovations aimed at increasing the effectiveness of physical education and sports using environmental factors. Around the world, problems related to the environment and physical education have become some of the pressing global issues awaiting resolution. The results of many fundamental, pedagogical, scientific studies devoted to solving existing problems were carried out by leading scientists in the industry at prestigious higher educational institutions around the world and put into practice. Solving existing problems in this area requires conversion of the attention of the world community to their elimination by increasing the effectiveness of physical education and sports. The resolution of the United Nations General Assembly adopted at the "Summit for Sustainable Development" states that in the period until 2030 the geography of a stable environment will expand.

In developed countries of the world, scientific research is being conducted to eliminate the negative impact of the environment on the results of physical education, and to prevent the transcontinental development of environmental problems. In this process, it is important to improve the skills and competencies of teaching staff in the use of modern educational models to increase the effectiveness of physical education classes using environmental factors. In particular, the International Environmental Organization Greenpeace is implementing international research projects aimed at developing a system for preventing and reducing the negative impact of the environment on sports results.

In the republic, issues of broad involvement of young people in physical education and mass sports in the system of continuous education, preserving the cleanliness of the environment are resolved at the level of state policy. The implementation of the national project "Yashil Makon" ("Green Space"), also within the framework of the influence of the environment on the sphere of physical culture and sports, requires scientific research in this area. Currently, "...one of the main tasks is to take serious measures to improve the environmental culture of the population." In our country, there is a need to conduct scientific research and create

scientific and methodological manuals to improve the effectiveness of physical education and sports classes using environmental factors, create a stable environment, reduce the negative impact of the environment on the results of physical education and sports, improve the results of the participation of athletes countries at international competitions, improving innovative methods and scientific organization of physical education and sports.

Information available in the literature shows that regularly increasing demands on modern youth increases their level of mental stress. As a result, their level of physical activity decreased not only at work, but also in everyday life. Almost 50% of students do physical exercise for only 2-3 hours during the week, and 45% do not do it at all. This, in turn, leads to a weakening of the body, a decrease in the level of health, physical development and physical fitness. Among students, the number of those assigned to a special medical group (SMG) is increasing due to various health conditions. According to information from K.B. Muhammadieva (2022), in various universities of the republic the number of students studying in the SMG is 30%.

How much heat is transferred during physical education classes depends on the air temperature. If the air temperature is 18-20°C, then 44% of the heat is transferred by radiation, 33% by convection, 23% by sweating of the body. If the air temperature is 30°C, then 50% of the heat is transferred by sweating and the remaining 50% by radiation and convection. If the air temperature is more than 30°C, then all the excess heat in the body is transferred through sweating. Evaporation of 1 gram of sweat occurs due to the absorption of 2.5 kJ of heat.

The pedagogical research involved 375 students of the I-II levels of TSTU, 368 students of the I-II levels of Ferguson State University, and a total of 691 students of the I-II levels. Of these, 315 people were combined into the experimental group and 376 into the control group.

Analysis of the practical situation of the problem showed that the nature of scientific views on the pedagogical basis for increasing the effectiveness of physical education classes using natural environmental factors has not been sufficiently studied from a scientific and practical point of view. This pedagogical problem has practically not been studied within the framework of scientific research work. As a result of the lack of specific theoretical and methodological literature on the pedagogical principles of increasing the effectiveness of physical education using natural environmental factors, the concept of the term "Environment" did not form in the minds of students.

Year-long classes were conducted on-the-job, based on a calendar plan, with special attention to environmental factors. Therefore, students from universities not specialized in physical education (TSTU and Ferguson State University) were required to complete a load of practical classes in physical education throughout the year, according to the curriculum (see Table 1).

Table 1 Distribution of academic trainings held during the year in sports in accordance with the curriculum of TDTU and FarDU (in hours)

T/r	Name of sports	1st course	
		1st semester	2nd semester
1.	Introduction to science	2	-
2.	Swimming	2	2
3.	Athletics	4	4
4.	Table tennis	2	4
5.	Football	6	6
6.	Basketball	6	4

7.	Volleyball	6	6
8.	Gymnastics	2	4
Total		30	30

Based on this, a preparation program for the exercises has been developed, which takes into account the volume of classes conducted, according to the curriculum. To determine the physical and functional readiness of students, the following control tests were used: 100 m run (s); 2000 m run; standing long jump; standing triple long jump.

In the process of annual training, it was revealed that the rate of formation of physical and functional readiness of students is low. Such planning of academic loads creates the basis for the student to be interested in physical education classes, feel free in nature and participate with interest in the following classes.

At stage 1, the educational process occupied 75% of the time. More attention was paid to general physical fitness. 25% of the time was devoted to the first stage of special training, including special physical training and technical and tactical actions.

In stages 2 and 3, 50% of the time was spent on SP and 50% on SP. In the fourth stage, 25% of the time was spent on SP and 75% on SP.

Using the principles relating to the influence of factors and environmental environmental conditions on health, a model of their influence on the health of students has been developed, which reveals factors and conditions, the level of socio-economic, production and industrial development, environmental protection, food, housing, recreation, physical development education and medical science, the availability and organization of medical care, study and working conditions, characteristics of ethnic culture, standard of living, level of health of students, biological factors, including heredity, natural geographic climate conditions and interdisciplinary communication when choosing materials related to the study of the environment, unity of theory and practice affecting the health of students.

At the same time, there are a number of subjective and objective factors aimed at increasing the efficiency of the physical education process. In particular, in order to assess the level of physical fitness of 1st year students, we examined the results of three qualities – speed, strength endurance and general endurance in control exercises of the last four years.

To ensure their comparability, the experimental data of the control exercises were translated into a single (standardized) measurement scale according to the formula described in this technique. By subtracting arithmetic averages from the given indicators, intermediate estimates were obtained that generally characterize the level of physical fitness of students at the beginning and end of stages 1-2.

In addition to the test results, it is possible to assess the increase in interest in physical education among students based on their participation in various sports events held at the faculty and at the institute.

So, the results of our practical and theoretical work, observed in our scientific research, have shown that if the above-mentioned ideas aimed at increasing the effectiveness of physical education and sports training using environmental factors are used in the process of lifelong education, the younger generation will be comprehensively developed, will make a great contribution to the development of a person with high knowledge and potential.

List of used literature

1. Гаттаров Р.У. Исследование показателей функционального состояния студентов трехмедицинских групп здоровья / Р.У. Гаттаров, Т.В. Потапова, С.М. Зубков и др. // Вестник южно-уральского государственного университета. Серия “Образование, здравоохранение, физическая культура”. 2007. №16 (88). вып. 12. С.43-49.
2. Маъруфов М.М. Ekologik og‘ir hududlarda talabalar bilan tabaqalashtirilgan jismoniy tarbiya mashg‘ulotlarini o‘ziga xosligi // “Pedagogik mahorat” ilmiy nazariy va metodik jurnal-Buxoro, 2022. 2-son. – B. 237-241
3. K.B. Mukhammadiev, IM Mirzakulov, AH Karimov. Methodological fundamentals of formation of ecological culture in students. AIP Conference Proceedings 2432 (1), 030054
4. K.B. Mukhammadiev. Physical Education and Sport and Student Health Factor. Berlin Studies Transnational Journal of Science and, 2021.