Adaptation of Physical Education Methods to Climate Conditions

Berdiyev Ghairat¹, Sabina Razzokova²

Annotation: In this article, the issue of adaptation of the methods used in physical education classes and physical education classes to climatic conditions is defined as an urgent issue. We know that climatic factors have a direct effect on training efficiency. This article is about climate factors.

Key words: Methods of physical training, climate, adaptation, physical activity, physical condition, High temperature, humidity, solar radiation, wind, Regional climate characteristics.

Introduction to the adaptation of physical education methods to climatic conditions is an important stage of research, because it determines the main motives and directions of this department. The need to adapt techniques becomes clear in the context of the different climatic conditions that may exist in different regions.

Physical activity of students is influenced by the climate, and this influence can significantly affect the effectiveness of classes and the general physical condition of students. Climatic conditions such as high temperature, humidity, intensity of solar radiation and even wind can affect the physiological and psychological aspects of the learning process.

Addressing climate adaptation includes recognizing the importance of adapting teaching approaches and curricula to specific climates. This includes understanding how different climate factors affect students' bodies and what aspects of physical activity need to be modified to ensure optimal learning conditions.

An introduction to climate adaptation lays the groundwork for a more in-depth study of various aspects of adapted curricula, pedagogies and tools, and provides a context for further analysis of the effectiveness of these interventions in warmer climates.

The analysis of climate factors is an integral part of the research, because different climate conditions can have a significant impact on the implementation of physical activity. The main parameters to pay attention to are air temperature, humidity, solar radiation and wind.

Considering the air temperature is important to determine the optimal conditions for physical activity. High temperatures can increase the risk of heatstroke, especially during high-intensity exercise. At the same time, low temperatures can pose a risk to students' health, which requires that curricula be adapted accordingly.

Determining regional climate characteristics allows for a more accurate assessment of the impact of climate factors on physical activity. For example, in areas with high humidity, you may need to increase your hydration regimen, and in areas with strong sunlight, you may need to use UV protection.

A climate analysis also includes an assessment of wind, which can help or hinder outdoor activities. Proper adaptation of training programs to wind conditions not only contributes to safety, but also to the effectiveness of training.

The analysis of climate factors allows to determine the main aspects that should be taken into account when developing adapted physical education methods. Taking into account the specific climate of the



¹ Termiz State Pedagogical Institute Teacher of the Faculty of Physical Culture

² Termiz State Pedagogical Institute 2nd year student of the Faculty of Physical Culture

region, classrooms can be effectively adapted to provide maximum opportunities for physical development with minimal risk to students' health.

Developing tailored exercise programs is a key step in ensuring that physical activity in hot climates is effective and safe. The development of approaches to the adaptation of educational programs requires a thorough analysis of climatic conditions and taking into account the physiological characteristics of students.

Depending on the temperature conditions, you can make appropriate changes to the intensity and duration of training. It is recommended to regulate the intensity of physical activity in order to prevent overheating of the body during the period of increased temperature. At the same time, you can increase the intensity of training, taking into account that the body responds more effectively to physical activity at low temperatures during cool periods.

Adaptation of educational programs includes taking into account the physiological characteristics of students. Different age groups may have different training needs, and individual characteristics of students, such as fitness and health levels, should be taken into account to achieve optimal results.

In addition, it is recommended to carefully monitor the body's response to climate change. Watch for signs of overheating, dehydration, and other physiological changes. This allows you to quickly adapt the curriculum and provide safe conditions for physical activity of students.

The development of adapted educational programs requires a comprehensive approach that takes into account both the characteristics of the climate and the individual characteristics of students. This provides optimal conditions for effective physical development, while reducing health risks and providing students with an enjoyable and safe physical activity experience.

Providing favorable conditions for physical activity in different climates requires the use of special pedagogical methods aimed at managing lessons and supporting students.

The study of pedagogical methods begins with the analysis of effective strategies for influencing the comfort level of students. It includes not only physical, but also psychological comfort. Teachers need to consider the emotional and motivational aspects of the learning process, especially in hot climates where moods and interest in activities can change.

Developing lesson management strategies involves flexibility in lesson planning and delivery. Educators must be prepared to adapt programs in real-time, taking into account the current climate and student reactions. This includes varying exercise intensity, increasing rest intervals, and focusing on activities that help cool down the body.

Supporting students in adapted conditions includes not only physical, but also emotional support. Teachers must create a positive and supportive learning environment, encourage students to overcome challenges, and support them in the process of achieving their goals.

Pedagogical methods of providing favorable conditions are an integral part of adapted physical education methods. These methods not only promote effective physical development, but also create a positive and enjoyable learning experience that increases student motivation and interest.

Tools and equipment for exercise in different climates play an important role in ensuring the effectiveness and safety of exercise. A review of tools and equipment begins by examining what tools can be used to adapt the activity to different climates.

In hot climates, it is important to ensure that students are able to effectively cool themselves during exercise. For this purpose, it is possible to use cooling systems, special fans and means that provide access to cool water. Such measures help prevent overheating and dehydration of the body.

In cold climates, it is important to provide students with means to keep warm. This includes warm clothing, special heating systems, and shelters that allow outdoor training in low temperatures.

When exercising outdoors, it is also important to provide adequate protection from harmful environmental factors such as sunlight. This may include using sunscreen, special clothing, and heatstroke prevention products.

Recommendations for the selection and use of such products to ensure safety and comfort vary depending on the climate and the nature of the activity. It is important to choose equipment taking into account the physiological and psychological characteristics of students in order to ensure the maximum effectiveness of training with minimal risk to the health of students.

Correct selection of tools and equipment plays a key role in successfully adapting physical education methods to different climatic conditions, ensuring the safety, comfort and efficiency of training.

Practical examples of adapted physical education methods in hot climates are the main component of successful implementation of these programs. Let's take a look at a few specific examples where the use of customized methods has led to positive results.

An adapted physical education program was introduced in one of the schools located in the region with a hot climate. This program included morning and evening classes to avoid peak heat during the day. Special lesson plans that take into account changes in training intensity depending on the ambient temperature have also been introduced. As a result, it was noted that the students' interest in the lesson increased and their general physical fitness improved.

Another example is a children's sports school that emphasizes summer sports and has developed a training schedule system that takes temperature changes into account. Regular breaks for rest and cooling have been introduced, as well as increased monitoring of water supply to students. The results showed a reduction in the incidence of heatstroke and an improvement in overall fitness.

The analysis of the effectiveness of the implementation of customized programs was carried out taking into account not only the physical condition of students, but also their general activity, level of interest and educational indicators. In general, practical examples confirm that well-adapted physical education methods in hot climates not only help to improve physical health, but also create conditions for more successful learning. These examples can serve as a basis for further research and implementation of adapted programs in other educational institutions.

Evaluating the effectiveness of adaptation of physical education methods to climate conditions is an important step of research necessary to identify achievements, problems and possible improvements in the implementation of programs. There are several key aspects researchers can consider when developing performance metrics. The first is changes in students' physical fitness, such as increasing endurance, strength, and flexibility. Secondly, it is important to take into account psychological aspects such as students' level of motivation, interest in lessons and general mental state. It is also necessary to analyze the frequency of occurrence of heat stress and other negative events during training. Analysis of results may include comparing initial and final student results, statistical processing of data, and identification of key trends. It is also important to take into account the feedback of students, parents and teachers in order to understand their perceptions of the changes and assess their level of satisfaction.

Final conclusions on the effectiveness of climate adaptation of physical education practices may include recommendations for program optimization, identified strengths, and areas requiring further attention. Also, researchers can suggest ways to further improve the methods based on the obtained results. This is an important step in the process of improving the physical education system in different climatic zones.

References

- 1. Хрипкова А.Г., Антропова М.В. Адаптатсия организма учахнится учебной физической нагрузкам. М.Просвихение. 2002
- Salomov R.S. Sport mashg'ulotning nazariy asoslari Toshkent, Oʻquv qoʻllanma OʻzDJTI, 2005 yil

- 3. Bobomurodov A.E. "Jismoniy tarbiya, sport nazariyasi va uslubiyati" (Jismoniy sifatlarning umumiy tavsifi). Oʻquv qoʻllanma. T.,-2020.
- 4. D.X.Umarov "Jismoniy mashqlar biomexanikasi " Toshkent., 2017 y.
- 5. Бегимкулов, О. Ж. (2019). Вопросы организации сетевого взаимодействия как всей системы непрерывного образования в целом. *Мир педагогики и психологии*, (10), 22-28.
- 6. Турсунов, С., Пардаев, Т., & Бегимкулов, О. (2015). Узбекская национальная борьба: история и традиции (на узбекском языке). *Термез.«Сурхоннашр, 34*.
- 7. Jurayevich, B. O. (2023). Ways to Develop Education for Obtaining General Physical Qualities of Young Wrestlers Through Action Games. *Indonesian Journal of Multidiciplinary Research*, *3*(1), 153-158.
- Daminov, I. A. (2022). UMUM TA'LIM MAKTAB O 'QUVCHILARIDA SOG 'LOM TURMUSH TARZINI SHAKLLANTIRISHNING MUHIM TOMONLARI. Academic research in educational sciences, 3(7), 28-34
- 9. Mansur, U. (2022). Distribution of Training Loads in The Annual Cycle of Training of Highly Qualified Boxers. *ASEAN Journal of Physical Education and Sport Science*, 1(1), 43-50.
- 10. Urolovich, B. C. (2024). Using the Game in Teaching Physical Exercises to Primary Class Students. Best Journal of Innovation in Science, Research and Development, 3(3), 780-783.
- 11. Urolovich, B. C. (2023). Pedagogical Principles of Using Activity and National Games in the Physical Education of Student Girls. Best Journal of Innovation in Science, Research and Development, 2(12), 575-579.
- 12. Elmurod, E., & Urolovich, B. C. (2023). Factors Developing Professional Pedagogical Creativity Of Future Physical Education Teachers. Iqro Jurnali, 2(1), 293-297.
- 13. Ashiraliyevich, D. I. (2022). Solving situations in tactical training in martial arts on the example of judo. Modern Journal of Social Sciences and Humanities, 4, 160-163.
- 14. Shaydullayevich, S. U. (2022). Spécial course" non-traditional methods of a healthy lifestyle" as a means of forming a healthy lifestyle and physical activity of students. *Berlin Studies Transnational Journal of Science and Humanities*, 2(1.5 Pedagogical sciences).
- 15. Zarina, R. (2023). PATRIOTIC EDUCATION OF DISABLED STUDENTS THROUGH PHYSICAL EDUCATION AND SPORTS. Best Journal of Innovation in Science, Research and Development, 304-307.
- 16. Urolovich, B. C. (2024). THE ROLE OF DIDACTIC GAMES IN PERSONALITY FORMATION OF PRIMARY CLASS STUDENTS. *Miasto Przyszłości*, 48, 1484-1490.
- 17. Rustamovich, A. I., Azizjon oʻgʻli, A. S., & Hayotbek oʻgʻli, N. I. (2024). MASOFAVIY TA'LIM VA UNI TASHKIL ETISH ASOSLARI. *World scientific research journal*, 27(1), 165-170.
- 18. Urolovich, B. C. (2023). Pedagogical Principles of Using Activity and National Games in the Physical Education of Student Girls. *Best Journal of Innovation in Science, Research and Development*, 2(12), 575-579.
- 19. Shakhboz, A. (2024). A REVOLUTION IN PHYSICAL EDUCATION AND SPORTS: THE EFFECTIVENESS OF ARTIFICIAL INTELLIGENCE. *Miasto Przyszłości, 48,* 1442-1445.
- 20. Abduraimov, S., & Allayorov, A. (2023). INSON SALOMATLIGIDA JISMONIY TARBIYA VA SPORTNING O 'RNINI KOMPLEKS TAHLIL QILISH. Solution of social problems in management and economy, 2(13), 173-176.