ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 09,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

INTRODUCTION OF PHYSICAL ACTIVITY IN PHYSICAL EDUCATION AND SPORTS CLASSES

Mirzakulov Isazhan Musazhanovich

Associate Professor of the Department of Physical

Education and Sports of the Tashkent State Transport University

Abstract: The article examines the issues of implementing physical activity in physical education and sports classes in educational and sports institutions. It analyzes modern approaches to planning and monitoring the volume, intensity and structure of classes, the role of individualization of loads, the principles of safe organization of the training process and evaluation of the effectiveness of the implemented measures. It considers methodological aspects related to the use of modern monitoring tools (heart rate belts, digital platforms, physical fitness testing) and the principles of adapting programs to different age groups and levels of training. The purpose of the study is to determine the optimal practices for implementing physical activity to improve physical fitness develop motor skills and motivate students to an active lifestyle.

Keywords: physical education, physical activity, programming classes, individualization, safety, monitoring, adaptation, motor skills, physical training, motivation.

Introduction. The introduction to the topic is related to the need for systematic implementation of physical activity in physical education and sports classes to improve the effectiveness of the educational process and the overall level of physical fitness of students and athletes. Modern practice requires an integrated approach: planning of activity according to goals and objectives, taking into account age and physiological characteristics, using modern methods of control and evaluation, ensuring the safety and motivation of participants. The article covers the theoretical foundations, practical approaches to implementation, as well as examples of organizing classes with different levels of load.

Physical education and sports occupy an important place in the system of general education and professional sports growth. Effective implementation of physical activity requires a systematic approach: taking into account the characteristics of students, the goals of classes, the level of training, health restrictions and infrastructure conditions. Modern practice provides not only for physical education lessons, but also for the formation of skills for independent organization of training activities, the development of motivation for regular classes and the formation of a healthy lifestyle culture. This article analyzes the principles of planning and monitoring of loads, considers modern methods for assessing physical fitness and the functional state of the body, and offers examples of the implementation of load programs in physical education and sports classes in educational institutions.

Literature review. Modern literature on physical training emphasizes the importance of a structured approach to loads in classes: periodization of the training process, progressive overload, control over intensity and volume, consideration of biomechanical and biochemical parameters. In works on sports pedagogy, the principles of individualization, functional testing and adaptation of programs for age, gender, initial level of training are noted. A number of studies demonstrate the relationship between the systematic implementation of loads and the

ORIGINAL ARTICLE
INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE
ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 09,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

improvement of motor skills, motivation and educational results. Issues of safety, injury prevention and the effective use of monitoring technologies are also covered.

The problem of introducing loads in physical education is covered in works on sports pedagogy, training process theory and functional diagnostics. Research notes the importance of individualizing loads and balancing volume and intensity. At the same time, the role of monitoring the body's condition, recovery and prevention of overfatigue and injuries is emphasized. The publications consider methods for determining the load: from simple balances by volume and intensity to modern models of monitoring and analyzing data from wearable devices. The work also discusses the principles of safe implementation of training programs in the school and university environment, as well as examples of the implementation of digital tools for collecting and analyzing data. In recent years, special attention has been paid to the adaptability of programs for various contingents of students and athletes, including young people, students and novice coaches.

Novelty. The novelty of the study lies in the integration of modern methods of load control with practical recommendations for implementation at the curriculum level in physical education and sports organizations. Criteria for selecting volume and intensity, adaptive schemes for different age groups, as well as recommendations for the use of digital monitoring and testing tools for an objective assessment of the effectiveness of the implemented programs are proposed. Unlike traditional approaches, a comprehensive model is considered that includes planning, implementation, data analysis and adjustment based on student feedback and test results.

Conclusion. Empirical implementation of physical activity in physical education and sports classes requires consistency and consideration of the individual characteristics of participants. The use of structured planning, monitoring and adaptation of programs allows you to improve physical fitness, motor skills and motivation for classes. Efficiency depends on the accuracy of goals, correct load calibration, safety and the use of modern technologies for assessment and feedback. By implementing such approaches, educational institutions can achieve sustainable results in the development of physical education and sports among students and athletes.

Methods. The work uses conceptual methods of system analysis, a review methodology of literature on sports pedagogy and physical education, as well as practice-oriented approaches to planning and monitoring. The methods of assessing physical fitness are considered: tests of strength, aerobic endurance, speed and flexibility; methods of functional examination; as well as approaches to load analysis: volume, intensity, frequency, recovery. Recommendations for the use of wearable devices, training logs and tables of criteria are provided as an approximate toolkit. The studies focus on practical application: how to plan a quarter, how to adjust the program based on the testing results, how to organize feedback and injury prevention.

Main part

Principles of load planning

Goal setting: setting goals at the level of a lesson, semester and year.

Individualization: taking into account the age group, level of training, medical restrictions.

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 09,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

Load proportions: balance between aerobic, strength, flexibility and coordination training.

Recovery: distribution of time for recovery and sleep, micro- and macrocycle.

Safety: conducting pre-workout medical examinations, monitoring the territory and technique of execution.

Monitoring methods and tools

Wearable devices and applications: tracking heart rate, power, speed, volume of work.

Workout logs: recording sensations, pain, fatigue level and motivation.

Testing: periodic tests for endurance, strength, speed-strength parameters.

Data analysis: comparative analysis of the dynamics of indicators, identifying trends and risks.

Examples of training programs

Lesson 1-2: introductory part, recovery after the holidays, light load and adaptation.

Lesson 3-6: gradual increase in volume, focus on technique and coordination.

Lesson 7-9: development of anaerobic endurance and strength.

Lesson 10-12: control tests and program correction.

Example of a quarter scheme: by weeks indicating the total volume, intensity, types of activity.

Safety and injury prevention

Warm-up and cool-down: structured schemes for each lesson.

Gradual progression: limit sudden changes in load.

Pay attention to well-being: early signs of overload, pain signals.

Recovery: sleep, nutrition, hydration, active recovery.

Efficiency monitoring

Efficiency criteria: physical fitness, progress in tests, motivation and involvement.

Evaluation methods: comparison of results before and after the load period, analysis of dynamics.

Feedback: timely adjustment of programs based on data and feedback.

Conclusion. Effective implementation of physical activity in physical education and sports classes requires a comprehensive approach, combining theoretical knowledge and practical tools. The most important components are individualization, careful monitoring of students' condition, safe progression of the load and systemic feedback. The use of digital monitoring tools, clearly structured quarter plans and clear performance criteria allows to increase the

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 09,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

effectiveness of classes, develop sustainable habits of physical activity in students and form a sports culture in the educational environment. Prospects for further research include the development of more accurate models of adaptive load, the integration of artificial intelligence for data analytics and the expansion of injury prevention methods in the school and student environment.

1. References:

1. Frolova, N. N. (2021). Psychological and pedagogical aspects of physical education of student youth. Journal of Psychology and Pedagogy, 72(3), 5-13.
2. 2. Mukhammadiev K.B. Dynamics of growth and recovery of physical qualities, functional training, physiological state of the organism of students during sports training // Public Education – Tashkent, 2020. Issue 6, – pp. 78-84.