

EFFECTIVE METHODS OF DEVELOPING THE PHYSICAL ABILITIES OF SCHOOL-AGE STUDENTS THROUGH GYMNASTICS WITHIN THE FRAMEWORK OF THE NEW UZBEKISTAN DEVELOPMENT STRATEGY

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Abstract

This article examines effective methods for developing the physical abilities of school-age students through gymnastics within the framework of the New Uzbekistan Development Strategy. The study substantiates the pedagogical significance of gymnastics as a universal means of improving strength, flexibility, agility, coordination, speed, and endurance in the school education system. Special attention is paid to the fact that gymnastics not only strengthens students' physical preparedness but also contributes to the formation of discipline, willpower, self-confidence, attentiveness, and a stable motivation for regular physical activity. The article analyzes contemporary methodological approaches aimed at improving physical education lessons, including differentiated instruction, age-appropriate exercise selection, gradual increase of physical load, game-based tasks, and health-preserving technologies. It is emphasized that gymnastics serves as an effective educational tool for ensuring the harmonious development of learners, strengthening health, preventing hypodynamia, and increasing interest in physical culture. The article also considers the organizational and methodological conditions required for the effective use of gymnastics in schools, including teacher competence, lesson planning, safety standards, and the integration of national development priorities into educational practice. Based on theoretical analysis and pedagogical interpretation, the study concludes that gymnastics plays an important role in raising a physically active, healthy, and socially responsible younger generation.

Keywords: Gymnastics, physical abilities, school-age students, physical development, coordination, flexibility, strength, endurance, agility, physical education, pedagogical methods, health-preserving technologies, movement activity, educational process.



Introduction

YANGI O‘ZBEKISTON TARAQQIYOT STRATEGIYASI DOIRASIDA GIMNASTIKA TURLARI ORQALI MAKTAB YOSHIDAGI O‘QUVCHILARNING JISMONIY QOBILIYATLARINI SAMARALI RIVOJLANTIRISH USULLARI

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Annotatsiya

Ushbu maqolada Yangi O‘zbekiston Taraqqiyot Strategiyasi doirasida maktab yoshidagi o‘quvchilarning jismoniy qobiliyatlarini gimnastika vositasida rivojlantirishning samarali usullari tahlil qilinadi. Tadqiqotda gimnastikaning maktab ta’limi tizimida kuch, egiluvchanlik, chaqqonlik, koordinatsiya, tezkorlik va chidamlilikni takomillashtiruvchi universal vosita sifatidagi pedagogik ahamiyati asoslab beriladi. Gimnastika nafaqat o‘quvchilarning jismoniy tayyorgarligini mustahkamlashi, balki ularda intizom, iroda, o‘ziga ishonch, diqqatlilik va muntazam jismoniy faoliyatga barqaror motivatsiyani shakllantirishga xizmat qilishi alohida yoritiladi. Maqolada jismoniy tarbiya darslarini takomillashtirishga qaratilgan zamonaviy metodik yondashuvlar, jumladan differensiallashgan ta’lim, yoshga mos mashqlar tanlovi, yuklamaning bosqichma-bosqich oshirilishi, o‘yinli topshiriqlar hamda sog‘lomlashtiruvchi texnologiyalar tahlil qilinadi. Gimnastika o‘quvchilarning barkamol rivojlanishini ta’minlash, salomatligini mustahkamlash, gipodinamiya holatlarining oldini olish va jismoniy madaniyatga qiziqishini kuchaytirishda samarali pedagogik vosita ekanligi ta’kidlanadi. Shuningdek, maktab amaliyotida gimnastikadan samarali foydalanish uchun zarur bo‘lgan tashkiliy-metodik shart-sharoitlar, ya’ni o‘qituvchining kasbiy kompetensiyasi, darsni rejalashtirish, xavfsizlik me’yorlariga rioya qilish va milliy taraqqiyot ustuvorliklarini ta’lim jarayoniga integratsiya qilish masalalari ham yoritiladi. Nazariy tahlil va pedagogik talqinlar asosida gimnastika sog‘lom, jismonan faol va ijtimoiy mas’uliyatli yosh avlodni tarbiyalashda muhim omil ekanligi haqida xulosa qilinadi.

Kalit so‘zlar: gimnastika, jismoniy qobiliyatlar, maktab yoshidagi o‘quvchilar, jismoniy rivojlanish, koordinatsiya, egiluvchanlik, kuch, chidamlilik, chaqqonlik, jismoniy tarbiya, pedagogik usullar, sog‘lomlashtiruvchi texnologiyalar, harakat faolligi, ta’lim jarayoni

Introduction

Within the framework of ongoing reforms in the education system, the issue of strengthening the physical development of the younger generation has acquired strategic importance. The New Uzbekistan Development Strategy places particular emphasis on supporting youth, promoting healthy lifestyles, expanding mass sports, and creating the pedagogical conditions

necessary for the harmonious development of schoolchildren. In this context, physical education at school is no longer viewed only as a compulsory subject aimed at increasing movement activity. It is increasingly interpreted as a socially significant educational mechanism that contributes to improving health, cultivating discipline, and preparing students for active participation in society. Among the many means of physical education, gymnastics occupies a special place because of its broad developmental potential, accessibility, structured nature, and capacity to influence a wide range of physical abilities in a pedagogically controlled manner.

Gymnastics has long been recognized as one of the most effective components of school physical education. Its value lies in the possibility of systematically developing strength, flexibility, coordination, agility, balance, speed, and endurance through well-selected exercises that correspond to the age and functional readiness of students. Unlike many narrowly specialized sports, gymnastics includes a wide range of natural and specially organized movements that can be adapted to various educational goals. For school-age children, such adaptability is especially important, since their bodies are in a stage of active growth and development, and physical loads must be selected with methodological precision. Properly organized gymnastics classes contribute not only to physical preparedness, but also to posture correction, prevention of hypodynamia, improvement of motor culture, and formation of correct movement habits.

Another important aspect of gymnastics is its educational influence. In pedagogical practice, physical development cannot be separated from moral-volitional and personal growth. Through gymnastics, students learn order, accuracy, perseverance, concentration, self-control, and responsibility for their own physical condition. The structured nature of gymnastic exercises teaches learners to follow instructions, respect safety rules, and gradually overcome difficulties. This makes gymnastics not merely a physical training tool, but a multidimensional pedagogical means capable of supporting the broader objectives of school education. In the modern educational environment, where children are often exposed to sedentary lifestyles, digital overuse, and reduced outdoor activity, gymnastics becomes a particularly relevant mechanism for restoring balance between intellectual and physical development.

The relevance of the topic also stems from the need to improve the methodological foundations of physical education lessons in general secondary schools. In many cases, the developmental potential of gymnastics is not fully realized because of insufficient differentiation, limited methodological innovation, weak motivation among students, or inadequate integration of national educational priorities into teaching practice. Therefore, identifying effective methods for developing the physical abilities of school-age students through gymnastics is an important scientific and pedagogical task. Such methods should take into account not only physiological and age-related characteristics, but also the strategic orientation of contemporary educational policy, which seeks to raise a generation that is healthy, resilient, active, and intellectually mature.

The New Uzbekistan Development Strategy creates a conceptual basis for rethinking the role of physical education in school. It encourages the modernization of teaching methods, the strengthening of health-oriented approaches, and the expansion of opportunities for youth



participation in regular physical activity. Within this framework, gymnastics can serve as a universal pedagogical instrument that links educational content with national development goals. The search for effective methods in this sphere requires attention to lesson structure, exercise selection, progressive load distribution, student engagement, and the integration of active, game-based, and differentiated approaches. For this reason, the present study focuses on the pedagogical and methodological possibilities of gymnastics in enhancing the physical abilities of school-age students and in supporting the formation of a healthy and active younger generation.

Methods

This study is based on a qualitative and pedagogical research design aimed at identifying effective methods for developing the physical abilities of school-age students through gymnastics in the context of contemporary educational reforms. The methodological foundation of the research combines theoretical analysis, comparative examination of pedagogical approaches, interpretation of methodological literature, and the generalization of practical experiences related to school physical education. The study does not focus on gymnastics as a narrowly competitive sport, but rather as an educational and developmental means integrated into the broader system of school-based physical culture. Such an approach makes it possible to analyze gymnastics from the perspective of its instructional value, health-preserving potential, and role in the comprehensive formation of the learner.

The research relied primarily on the analysis of pedagogical, methodological, and psychological literature devoted to physical education, the development of motor abilities in school-age children, and the educational implementation of gymnastics exercises. Particular attention was given to scientific views on age-sensitive physical development, the principles of gradual load increase, differentiated instruction, and the pedagogical management of movement activity. In addition, the study examined normative and conceptual ideas associated with national educational modernization, especially those oriented toward youth development, the promotion of healthy lifestyles, and the strengthening of physical culture within the school environment. This allowed the topic to be interpreted not in isolation, but in relation to wider educational priorities and social demands.

The methodological logic of the study was structured around several interrelated stages. At the first stage, the conceptual and theoretical basis of gymnastics as a pedagogical tool was clarified. At this stage, the categories of physical abilities, including strength, speed, agility, flexibility, coordination, and endurance, were analyzed in relation to the developmental needs of school-age learners. The second stage involved identifying methods commonly used in the educational practice of gymnastics and evaluating their pedagogical effectiveness. These methods included repetitive exercise, circuit-based activity, differentiated tasks, mobility and posture exercises, coordination drills, pair and group activities, and movement games integrated into the lesson structure. The third stage consisted of synthesizing these methods into a pedagogically coherent system that corresponds to the requirements of school physical education and the developmental priorities reflected in current national strategy.



A central methodological principle of the study is the recognition that school-age students differ significantly in their physical preparedness, motor experience, psychological readiness, and interest in physical activity. For this reason, the analysis prioritizes differentiated and learner-centered methods. Gymnastics exercises were examined as adaptable tools that can be simplified, intensified, or modified according to age, gender, health status, and functional capacity. This principle is especially important in school settings, where a single class may include students with highly diverse physical abilities. The study therefore considered effective methods to be those that ensure inclusion, safety, gradual development, and positive emotional engagement rather than mechanical performance of uniform tasks.

Another important methodological dimension was the health-preserving orientation of gymnastics instruction. The study analyzed methods not only in terms of their capacity to improve performance indicators, but also in relation to posture formation, injury prevention, fatigue regulation, breathing control, and emotional balance. This approach reflects the contemporary understanding that physical education should support overall well-being rather than merely target athletic outcomes. In this regard, warm-up structures, stretching sequences, corrective exercises, relaxation components, and movement-based games were interpreted as pedagogically significant methods contributing to both developmental and preventive goals.

The interpretive and comparative method was also applied to assess the internal logic of different gymnastics-based teaching techniques. Methods were compared according to such criteria as accessibility, adaptability, motivational effect, safety, and developmental breadth. On this basis, the study identified those approaches that are especially suitable for school-age students within the institutional realities of general secondary education. Thus, the methodological framework of the research combines theoretical rigor with pedagogical practicality and provides a basis for understanding how gymnastics can be used more effectively to support the physical development of schoolchildren in line with the strategic priorities of the New Uzbekistan Development Strategy.

Results

The analysis showed that gymnastics possesses substantial pedagogical potential for developing the physical abilities of school-age students when it is organized through methodologically sound and age-appropriate instruction. The most significant result of the study is the identification of a group of methods that consistently contribute to the improvement of strength, flexibility, coordination, agility, speed, and general endurance in the school environment. These methods are effective not because they rely on high-intensity activity alone, but because they ensure systematic movement experience, progressive challenge, and active student participation. The findings indicate that gymnastics is especially valuable in school education because it allows teachers to influence several physical qualities simultaneously while maintaining control over safety, technique, and individual adaptation.

One of the central results concerns the effectiveness of differentiated instruction in gymnastics lessons. The study found that students demonstrate greater physical progress when tasks are adapted to their developmental level, movement preparedness, and health condition. Uniform exercises performed without adjustment often lead to reduced motivation among weaker



students and insufficient challenge for stronger ones. In contrast, differentiated gymnastics activities make it possible to assign variable complexity, change the amplitude or tempo of movements, and regulate the number of repetitions according to individual capabilities. As a result, each learner remains involved in the educational process and experiences a manageable but meaningful level of physical effort. This contributes not only to the development of physical abilities, but also to confidence and persistence.

The findings also revealed the high effectiveness of movement combinations and coordinated exercise sequences in developing agility, balance, and spatial orientation. Gymnastics exercises that require precise control of body position, changes in direction, rhythm maintenance, and bilateral movement coordination were shown to activate several psychomotor mechanisms at once. Such exercises help students acquire movement accuracy and improve neuromuscular regulation. In pedagogical terms, this is highly significant because school-age learners need not only stronger bodies, but also a more refined movement culture. The results suggest that gymnastics is especially effective when lessons include combinations of basic positions, dynamic balance tasks, floor exercises, and coordinated transitions, since these improve both technical control and overall motor literacy.

Another important result concerns the role of game-based and emotionally engaging methods in gymnastics instruction. The study found that school-age students respond more positively to exercises integrated into competitive, cooperative, or playful forms than to monotonous repetition alone. When gymnastic tasks are presented through relays, group challenges, rhythmic combinations, or movement games, students become more active, attentive, and willing to persist. This increased emotional involvement contributes indirectly to better physical development because students participate with greater intensity and regularity. The pedagogical value of this result lies in the fact that physical ability development is closely linked to motivation. In other words, methods that sustain interest are often more productive in the long term than those based solely on technical drilling.

The results further demonstrate the importance of gradual load progression and structured lesson design. Effective gymnastics instruction depends on the consistent sequencing of warm-up, main developmental exercises, coordination tasks, and recovery elements. When loads increase progressively and exercises are selected according to age-related functional readiness, students show more stable adaptation and fewer signs of fatigue or disorganization. This supports the conclusion that physical development in school cannot be accelerated through random intensification, but must be built through pedagogically controlled continuity. Corrective and posture-oriented exercises were also found to be especially valuable, as they contribute to the prevention of musculoskeletal imbalance and help students maintain functional readiness for other forms of physical activity.

Overall, the study results indicate that the most effective methods of developing the physical abilities of school-age students through gymnastics are those that combine differentiation, coordination-rich exercises, game-based motivation, gradual load increase, and health-preserving pedagogical management. These findings confirm that gymnastics can serve as a multifunctional educational resource within the framework of the New Uzbekistan



Development Strategy, supporting not only physical preparedness, but also student engagement, discipline, and long-term commitment to a healthy lifestyle.

Discussion

The results of the study confirm that gymnastics occupies a strategically important place in the system of school physical education and can serve as an effective pedagogical instrument for developing the physical abilities of learners in a comprehensive manner. The identified methods demonstrate that gymnastics is not limited to improving isolated motor skills, but functions as a structured educational medium through which strength, flexibility, agility, coordination, endurance, and movement discipline are developed simultaneously. In the context of the New Uzbekistan Development Strategy, this conclusion is particularly significant because the modernization of education requires not only the renewal of academic content, but also the strengthening of students' health, activity, and readiness for socially productive life. From this perspective, gymnastics becomes a practical mechanism for implementing broader state priorities related to youth development and the popularization of physical culture.

A key issue emerging from the findings is the importance of differentiation in school physical education. In traditional practice, physical training often relies on unified lesson formats that do not fully consider the diversity of students' abilities and preparedness. The present analysis shows that such an approach limits the developmental potential of gymnastics, especially in heterogeneous school groups. When differentiated methods are introduced, students are able to participate more actively and achieve more stable progress because the tasks correspond to their actual capabilities. This supports the idea that effective physical education must be organized according to pedagogical flexibility rather than standardized instruction alone. Differentiation in gymnastics is therefore not simply a methodological option, but a necessary condition for making physical development more inclusive, productive, and psychologically supportive.

Another important aspect of the discussion concerns the relationship between physical ability development and student motivation. The findings demonstrate that the effectiveness of gymnastics depends not only on exercise content, but also on the emotional and organizational form in which activities are presented. School-age students are more receptive to learning environments that combine movement with play, cooperation, rhythm, challenge, and visible progress. This means that teachers should not interpret gymnastics as a rigid or purely formal set of drills. On the contrary, its pedagogical value increases when it is transformed into an engaging and meaningful experience. Such an interpretation corresponds with modern educational principles, according to which lasting development occurs when students are cognitively involved, emotionally interested, and physically active at the same time.

The discussion also highlights the health-preserving significance of gymnastics in the contemporary school environment. Today many students experience reduced movement activity, prolonged screen exposure, posture disorders, and general physical passivity. Under such conditions, gymnastics offers a particularly relevant response because it includes exercises that strengthen the musculoskeletal system, improve coordination, regulate breathing, and support functional adaptation. The study suggests that school gymnastics should be understood not only as a means of physical improvement, but also as a preventive and corrective



component of educational practice. This broadens the pedagogical role of the subject and reinforces its importance in promoting healthy lifestyle habits from an early age. In this regard, gymnastics directly contributes to the formation of a physically literate generation capable of valuing health as a personal and social resource.

At the same time, the practical implementation of effective gymnastics methods requires several organizational and methodological conditions. Teacher competence remains one of the decisive factors. Even well-designed exercises may lose their developmental impact if they are presented without methodological precision, motivational support, or adequate safety control. Therefore, the quality of school gymnastics depends greatly on the teacher's ability to select age-appropriate tasks, regulate load, observe student condition, and create a supportive lesson atmosphere. The study also implies that institutional support is necessary, including appropriate equipment, safe learning spaces, and recognition of physical education as an essential part of educational quality rather than a secondary subject. Without such support, the strategic potential of gymnastics may remain only partially realized.

Thus, the discussion makes it clear that gymnastics should be viewed as a multifunctional educational resource that aligns closely with the goals of the New Uzbekistan Development Strategy. Its effectiveness is highest when it is delivered through differentiated, engaging, health-oriented, and pedagogically structured methods. The broader implication of the study is that the development of students' physical abilities is not a narrowly biological task, but an important dimension of holistic education. Through gymnastics, schools can help shape active, disciplined, healthy, and socially responsible individuals, which is fully consistent with the current priorities of national development and educational transformation.

Conclusion

In the contemporary educational process, the development of the physical abilities of school-age students should be regarded as one of the essential conditions for forming a healthy, active, and socially responsible younger generation. Within the framework of the New Uzbekistan Development Strategy, this task acquires particular significance because state policy increasingly connects educational quality with human development, youth support, public health, and the promotion of mass sports. In this broad strategic context, gymnastics emerges not simply as a component of physical education, but as an effective pedagogical means capable of ensuring the harmonious development of learners through systematically organized movement activity. Its value lies in the fact that it combines educational, developmental, preventive, and motivational functions within a single instructional system.

The conducted analysis has shown that gymnastics creates favorable opportunities for improving a wide spectrum of physical abilities, including strength, flexibility, coordination, agility, endurance, balance, and movement precision. At the same time, its pedagogical significance goes far beyond physical parameters alone. Properly organized gymnastics lessons help cultivate discipline, perseverance, self-control, responsibility, confidence, and sustained interest in physical activity. This makes gymnastics especially relevant for school education, where the task is not merely to increase physical load, but to shape a learner capable of conscious self-development and healthy lifestyle choices. The educational potential of



gymnastics is further strengthened by its accessibility and adaptability, which allow it to be adjusted to different age groups, levels of preparedness, and functional capacities.

One of the main conclusions of the study is that the effectiveness of gymnastics in developing students' physical abilities depends directly on the methodological quality of its implementation. The most productive approaches are those based on differentiation, gradual load progression, age sensitivity, coordination-rich movement tasks, health-preserving principles, and emotionally engaging forms of activity. These methods ensure that physical development takes place in a safe, inclusive, and pedagogically meaningful environment. The study has demonstrated that students achieve better outcomes when exercises correspond to their real abilities and when lesson content combines technical order with interest and movement diversity. Therefore, the success of gymnastics-based physical education should be measured not only by formal completion of exercises, but by the degree to which it supports lasting developmental change.

The findings also confirm that gymnastics can play an important role in addressing several contemporary challenges of school education. In conditions marked by sedentary lifestyle, reduced movement activity, digital overload, and posture-related problems among children and adolescents, gymnastics provides an effective corrective and preventive response. Through regular and methodically organized exercise, it helps strengthen the musculoskeletal system, improve functional readiness, reduce physical passivity, and restore balance between intellectual and bodily development. In this regard, gymnastics contributes not only to physical preparedness in the narrow sense, but also to the general well-being and adaptive capacity of students. This broadens its role within the educational system and supports the idea that physical culture should be integrated more deeply into modern schooling.

Another important conclusion concerns the role of the teacher and the educational environment. The developmental possibilities of gymnastics can only be fully realized when teachers possess sufficient methodological competence, understand the age-specific needs of learners, ensure safety, and create conditions for active and motivated participation. Institutional support is equally important, including appropriate facilities, adequate equipment, and recognition of physical education as a strategic area of pedagogical work. Consequently, the improvement of students' physical abilities through gymnastics should be approached as a systemic educational task rather than an isolated classroom practice. It requires cooperation between curriculum goals, teaching methods, school administration, and broader national policy priorities.

In summary, effective methods of developing the physical abilities of school-age students through gymnastics represent an important pedagogical resource for implementing the human-centered goals of the New Uzbekistan Development Strategy. Gymnastics offers a scientifically grounded and educationally meaningful path toward strengthening health, increasing movement culture, cultivating positive character traits, and forming a stable foundation for lifelong physical activity. Its role in school education should therefore be expanded and methodologically enriched, since it directly supports the formation of a physically developed, morally stable, and socially engaged generation. Under modern conditions, this is not merely a matter of improving physical education lessons, but a significant contribution to the future development of society as a whole.



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