



**EFFICIENCY OF THE METHODOLOGY FOR THE  
DEVELOPMENT OF MOTOR QUALITIES SCHOOLCHILDREN  
IN SPORTS ACTIVITIES**

Khamrokulov Rasul Abdusattorovich

Associate Professor of the Department “Theory and  
Methods of Physical Culture” Ferghana State University

**ABSTRACT**

The article presents the results of a pedagogical experiment on the introduction of the author's methodology of accentuated physical education classes with a training focus on the basis of pedagogical testing, annual monitoring of the level of physical status of children aged 6-7 years with their comparative analysis and correlation between analyzed indicators.

**KEYWORDS**

Accented classes, monitoring, motor fitness, standard, correlation, test, functional training

**INTRODUCTION**

Improving the quality of education is one of the urgent problems of the Republic of Uzbekistan, the solution of which is associated with the modernization of the content of education and the optimization of pedagogical technologies in the organization of the educational process.

The process of physical education in general education schools provides for the creation of the basis for basic physical training of schoolchildren, the formation of a fund of motor skills and abilities in order to experimentally substantiate effective means, forms and methods of educating physical qualities.

To address the issues of intensification of the process of physical education, many authors suggest using selective-directed physical activity during sensitive periods for the development of motor abilities in children starting school.

At the same time, according to a group of authors, primary school age is the most favorable period for a targeted impact on the development of the physical status of children.

The annual monitoring of the motor fitness of children who entered the school revealed their low level of physical status, which determined the conduct of research on the experimental substantiation of the methodology of focused classes on the development of lagging motor qualities using a block -modular training system.

In order to solve the tasks set, it seemed interesting to analyze the data on the physical development of students in the first year of schooling. The organization of the experiment was based on the scheme of comparative pedagogical research with the participation of control and experimental groups, where

children of the first grade of two secondary schools took part, and the results are presented in Table 1.

Table 1. Indicators of physical development of children in the first year of schooling

Age years	N	body length ( cm )	body weight ( kg )	Chest circumference (cm)
Girls				
6	26	111.5 ± 4.6	19.8 ± 1.9	56.8 ± 3.9
7	32	117.8 ± 4.9	22.7 ± 1.7	62.1 ± 3.3
boys				
6	24	114.6 ± 5.6	20.6 ± 2.8	56.4 ± 3.9
7	27	118.2 ± 4.7	21.9 ± 2.4	58.1 ± 2.8

With the children of the experimental group, daily lessons of physical culture were conducted by graduate students who are in teaching practice at this school, where the author's program was introduced in the educational process, focused on improving the lagging motor qualities of children, and the monitoring of indicators of children's physical fitness was carried out throughout the academic year after graduation. every quarter.

During the period of the experiment, the level of somatometric characteristics of children in the experimental group increased significantly by a statistically significant level. Thus, the body length of children, which reflects the nature of the formation of the child's body, tends to increase annually, with girls showing an increase of 6.3% ( $P < 0.01$ ), and boys by 5.6% ( $P < 0.01$ ).

A comparative analysis with the data obtained by M.S. Khaziakhmetova, the body length in girls at 6 years is less by 4,7 cm, but by the age of 7 this figure decreases to 3,2 cm., in boys at 6 years this difference was 0,4 cm., by 7 years - 0,6 cm.

Body weight in girls by the age of 7 increases in relation to 6 years on average by 2,5 кг ( $P < 0.01$ ), in boys by 1,3 кг ( $P < 0.01$ ).

The circumference of the chest increased in girls from 56,8 cm to 62,1 cm. and amounted to a difference in 5,3 cm, ( $P < 0.01$ ), in boys it significantly increased by 1,7 cm ( $P < 0.01$ ).

It is known that the basis of all conditions that stimulate the development of the child is pronounced muscular activity and movement.

Increasing the level of motor fitness of the younger generation is one of the urgent tasks of physical education. Without knowledge of the initial levels of development of the motor abilities of a growing organism, it is impossible to evaluate the results of targeted pedagogical influences and plan the process of improving the motor qualities of children.

To determine the motor fitness of children in the first year of schooling, they were monitored by quarters during the school year, where the battery of tests was borrowed from the state standards for physical education and pedagogical testing of the main indicators of motor fitness was carried out, the results of which are presented in tables 2 and 3.

An analysis of the initial results showed that 30 mthe boys overcame the distance on average in  $6.6 \pm 0.6$  sec, girls in  $7.2 \pm 0.5$  sec. It should be noted that physical education lessons were conducted by graduate students who are in teaching practice at this school and carried out the implementation in the educational process of the developed author's program of focused classes on improving the motor qualities of children.

When analyzing the physical quality of agility, assessed according to the test shuttle run 3 x 10m. the initial result in boys was 9.9±1.3 sec., in girls 10.9±0.6 sec. Conducted focused activities allowed to significantly improve the results in boys by 5.1%, in girls by 6.3%

Table 2 Motor readiness of boys aged 6-7

No.	Tests	QUARTERS										
		I		II		%	III		%	IV		%
		$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$		$\bar{X}$	$\sigma$		$\bar{X}$	$\sigma$	
1	Running 30 m. With	6.6	0.6	6.5	0.4	1.6	6.4	0.2	3.1	6.3	0.3	4.6
2	jump with \m, cm.	105.1	26.7	107.4	26.3	2.2	118.2	26.6	2.7	120.8	26.1	5.2
3	pull- ups number of times	11.7	2.3	12.3	2.2	4.9	13.8	1.9	15.3	15.2	3.2	22.1
4	Throwing a tennis ball, m.	14.1	4.0	14.7	4.2	4.1	15.9	4.3	11.4	16.8	6.1	16.1
5	Flexion and extension of the arms number of times	6.9	1.9	7.1	1.6	2.9	8.4	1.4	17.9	8.5	1.9	18.9
6	Shuttle run 3x10 m.s	9.9	1.3	9.8	1.4	1.1	9.6	1.8	3.1	9.4	1.8	5.1

Table 3 Motor readiness of girls 6-7 years old

No.	Tests	QUARTERS										
		I		II		%	III		%	IV		%
		$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$		$\bar{X}$	$\sigma$		$\bar{X}$	$\sigma$	
1	Running 30 m. With.	7.2	0.5	7.1	0.6	1.4	6.8	0.7	5.6	6.7	0.6	7.1
2	Long jump s\m, cm.	99.2	11.0	102.1	10.9	2.9	112.4	11.7	11.8	114.6	11.9	13.5
3	Throwing a tennis ball	10.4	3.4	11.6	3.2	10.4	12.8	3.9	18.8	13.6	3.5	23.6
4	Flexion extension of the arms, the number of times.	4.0	1.1	4.3	0.9	7.0	5.1	1.2	21.6	5.2	1.1	23.1
5	Shuttle run 3x10 m.s.	10.9	0.6	10.8	0.7	1.0	10.4	0.6	4.6	10.2	0.7	6.5
6	Raising the body a number of times.	7.3	3.1	7.6	2.8	4.0	9.1	3.2	19.8	9.2	3.2	20.7

After the end of the second quarter in the group of boys , the speed qualities tended to slightly improve by 0.1 seconds (1.6%) ( $p > 0.05$ ), in girls the improvement was 1.4%.

Throughout the third quarter, where lessons in athletics and games mainly prevailed, the indicators of speed capabilities in children increased significantly, in boys, on average, up to  $6.4 \pm 0.2$  seconds. (3.2%), and in the group of girls up to  $6.8 \pm 0.7$  sec. (5.6%).

Repeated studies at the end of the school year revealed that the speed capabilities of children significantly improved in boys by 4.6% and girls by 7.1%.

When assessing the speed-strength capabilities of children based on the results in long jumps from a place, the boys had a result of  $105.1 \pm 26.7$  cm, the girls jumped  $99.2 \pm 11.0$  cm.

At the end of the second quarter, the result for boys improved by 2.2%, and for girls by 2.9%. If we take into account that the physical activity of children is largely associated with jumps, then it becomes obvious that the speed-strength qualities of children must be given close attention in the educational process. The complex of developed measures aimed at improving the studied motor quality made it possible to significantly improve them in boys by 11.1%, girls by 11.8%, with a subsequent progressive increase in results in children by the end of the school year, respectively, by 13.0% and 13.5% .

to the strength capabilities of boys of this age group already at the first stages of schooling, where in the physical education classes the complexes of the simplest physical exercises aimed at strength training of children were offered.

Analysis of test indicators in pull-ups lying on the crossbar and flexion and extension of the arms in the lying position, the result was  $11.7 \pm 2.3$  times and  $6.9 \pm 1.9$  times, respectively. The positive dynamics of the growth of strength abilities is clearly visible in the quarters, where by the end of the second quarter by - 4.9% and 2.9%, in the third by - 15.3% and 17.9% and by the end of the academic year the improvement was 22.1% and 18.9%. Girls showed a significant increase up to 23.1%. A similar picture is observed in girls in the test indicators of lifting the body from a supine position, where the increase was 20.7%.

Difficult- coordinated motor actions as a test of throwing a tennis ball for comparison with the data of literary sources were not revealed and amounted to  $14.1 \pm 4,0$  m. in boys, exceeding the result of girls by 3,7 m.

In the second quarter, there was an unreliable improvement by - 0.6 m in boys and by 1.2 m. in girls. The introduction of accentuated motor tasks with a training orientation in physical culture classes and conducted by specialists in physical culture made it possible to significantly increase the performance in boys up to  $15.9 \pm 4.3$  m., in girls up to  $12.8 \pm 3.9$  m. , the increase was -11.4% for boys, 18.8% for girls .

Completing training in the first year, the results of repeated studies confirmed our earlier hypothesis that physical exercises focused on the development of the necessary motor qualities with a training orientation give a significant increase in performance, which is confirmed by the results of an improvement in boys by -16.1%, and in girls by -23.6%.

Statistical processing of the scientific material revealed in girls the highest coefficient of variation in the flexibility test (54.2%), pull-ups in the lying position (49.6%), flexion and extension of the arms in the lying position (42.8%) and lifting the torso from the prone position on the back (42.1%).

According to the data of physical development in girls, the highest rank of influence is body weight (27%) and body length (22%). In boys, chest circumference (24%) and body length (21%).

This determined the need for a correlation analysis of indicators of physical development and motor fitness of children, providing a scientifically based approach to the complex of means, in identifying valid control standards.

The correlation analysis of the physical development and motor fitness of children (Table 4) revealed a negative relationship among girls between the indicators in running 30 mand long jumps from a place, (  $r = -0.61$ : -0.62) and in boys (  $r = -0.52$ ) in flexion and extension of the arms in the lying

position and shuttle run. Weak connection determined between body weight and lifting the torso from the supine position ( $r = 0.34$ ), flexion and extension of the arms in the lying position ( $r = 0.49$ ).

**Table 4 Correlation coefficients between indicators of physical development and motor fitness of children of the first year of study**

No	Indicators	Name of tests	Correlation coefficient (r)	
1.	6-7	Running 30 m- shuttle run	0.62	0.62
2.	6-8	Running 30 m- long jump	0.61	0.61
3.	10-13	Throwing the ball - flexion and extension of the arms in the lying position	0.44	0.44
4.	10-16	Throwing - General Flexibility	0.43	0.42
5.	13-7	Flexion and extension of the arms in the lying position - shuttle run	-0.52	-0.52
6.	13-6	Flexion and extension of the arms in an emphasis lying down - running 30 m	-0.47	-0.47
7.	7-16	Shuttle Run - General Flexibility	-0.38	-0.39
8.	6-16	Running 30 m- general flexibility	-0.48	-0.45
9.	7-5	Shuttle run - run 10 m	0.41	0.41

The experiment made it possible to reveal the insufficient level of the physical status of children of the first year of study and requires:

- taking into account the individual characteristics of physical development and physical fitness of children of the first year of study, allowing to determine the groups of students by the level of their motor fitness in the process of conducting physical education lessons;
- normalization of the volume and intensity of motor activity corresponding to the biological needs of the children's body;
- optimal dosing of physical activity, taking into account the morpho-functional characteristics of a growing organism;
- regular implementation of medical and pedagogical supervision for the health of children.

The foregoing allows us to conclude that the teaching staff conducting classes with children of this age group, relying on constant monitoring of their health status, should search for effective ways to implement the tasks and make appropriate adjustments to the educational process.

### Literature

1. Robilova, S. M., & Patidinov, K. D. (2022). Physical training of handball and its comparative analysis practitioners. *Asian Journal of Research in Social Sciences and Humanities*, 12(4), 173-177.
2. Rahimjan, U. (2022). TERRITORIAL PECULIARITIES OF DIFFERENTIAL ASSESSMENT OF PHYSICAL FITNESS OF RURAL SCHOOLCHILDREN. *American Journal of Interdisciplinary Research and Development*, 9, 58-66.
3. Усманов, З. Н., & Убайдуллаев, Р. М. ПРОБЛЕМЫ ФИЗКУЛЬТУРНО-ОЗДОРОВИТЕЛЬНОЙ РАБОТЫ В СИСТЕМЕ ШКОЛЬНОГО ОБРАЗОВАНИЯ. 11. Usmanov, ZN, & Ubaidullaev, R. (2020, December). PROBLEMS OF PHYSICAL AND

- HEALTHY WORK IN SCHOOL EDUCATION SYSTEM. In *Конференци* (Vol. 12, pp. 114-119).
4. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. *ТА'ЛИМ ВА RIVOJLANISH TAHLILI ONLAYN ILMIIY JURNALI*, 2(9), 32-37.
  5. Khairullo, A., & Mohinur, R. (2022). Analysis of Physical Development Indicators. *Eurasian Research Bulletin*, 13, 8-14.
  6. Abdurakhmonov, X., & Rakhmonova, M. (2022, May). PHYSICAL INDICATORS OF SCHOOLCHILDREN. In *E Conference Zone* (pp. 39-43).
  7. Mamirzhon, Y. (2023, January). METHODOLOGY FOR THE DEVELOPMENT OF THE PHYSICAL QUALITIES OF A VOLLEYBALL PLAYER. In *E Conference Zone* (pp. 28-40).
  8. Ishmukhamedov, R., & Yuldashev, M. (2016). Ta'lim va tarbiyada innovatsion texnologiyalar. *T.: Nihol*.
  9. Mamirjan, Y. (2022). DEVELOPMENT OF VALELOGIC PHYSICAL CULTURE OF FUTURE TEACHERS OF PHYSICAL CULTURE. *Spectrum Journal of Innovation, Reforms and Development*, 8, 57-62.
  10. Yuldashev, M., & Yakubova, G. (2022, October). ADAPTIV JISMONIY TARBIYADA QAYTA TIKLANISH (REABILITATSIYA). In *E Conference Zone* (pp. 14-17).
  11. Ishmukhamedov, R. J., & Yuldashev, M. (2013). Innovative pedagogical technologies in education and upbringing. *T.: "Nihol" publishing house, 2016*.
  12. Yuldashev, M., & Qobuljonova, M. (2022). Goals and objectives of choreographic training in gymnastics. *Academicia Globe: Inderscience Research*, 3(5), 1-6.
  13. Туйчиева, И. И., & Ганиева, Г. В. (2016). ХАРАКТЕРИСТИКА ПРИНЦИПОВ ПЛАНИРОВАНИЯ РАБОТЫ ПО РАЗВИТИЮ РЕЧИ. *Учёный XXI века*, (11 (24)), 48-53.
  14. Akmal, K., & Azizbek, M. (2023). Formation of Children's Sports Development System in Rural Areas. *Eurasian Journal of Learning and Academic Teaching*, 16, 79-83.
  15. Косимов, А. (2022). Level of physical development of 13-15 year old students who are involved in swimming and school physical education. *Общество и инновации*, 3(4/S), 190-194.
  16. Bobojonov, N., Qosimov, A., & Abdubannopov, M. (2022, June). AGE-SPECIFIC CHARACTERISTICS OF PHYSICAL TRAINING OF COLLEGE STUDENTS. In *E Conference Zone* (pp. 64-67).
  17. Akmal, K. (2022). Health Promotion of Children of School Age with the Help of Physical Education on the Basis of State of Health. *Eurasian Scientific Herald*, 9, 126-130.
  18. Nozim, B., Kasimov, A., & Sabirov, T. (2022, June). AGE FEATURES OF THE DEVELOPMENT OF ADOLESCENTS 10-12 YEARS OLD ENGAGED IN VOLLEYBALL. In *E Conference Zone* (pp. 61-68).
  19. Қосимов, А. Н. (2021). ФОРМИРОВАНИЕ И ФИЗИЧЕСКОЕ РАЗВИТИЕ СОМАТОТИПОВ МЫШЦ У СТУДЕНТОВ 13-15 ЛЕТ, ЗАНИМАЮЩИХСЯ ШКОЛЬНОЙ ПРОГРАММОЙ. *Scientific progress*, 2(8), 849-853.
  20. Ogli, Z. U. M., & Ogli, P. K. D. (2020). УМУМИЙ ЎРТА ТАЪЛИМ МАКТАБИ 7–8 СИНФ ЎҚУВЧИЛАРИНИНГ ЖИСМОНИЙ ТАЙЁРГАРЛИГИНИ ЖИСМОНИЙ РИВОЖЛАНИШИГА БОҒЛИҚЛИГИ. *Academic research in educational sciences*, (4), 693-697.



21. Ashurali, T., & Javlonbek, M. (2022). METHODS OF CONDUCTING CHILDREN'S SPORTS GAMES. *Conferencea*, 30-34.
22. Oripjonova, R., & Tuychiyev, A. (2022). THEORETICAL FOUNDATIONS OF PHYSICAL EDUCATION AND SPORTS TRAINING IN WOMEN'S HEALTH PROMOTION. THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD, 1(1), 106-110.
23. Ashurali, T., & Aziz, U. (2022). GENERAL LAWS AND CHARACTERISTICS OF GROWTH AND DEVELOPMENT OF CHILDREN AND ADOLESCENTS. *Academicia Globe: Inderscience Research*, 3(11), 84-91.
24. Tuychiyev Ashurali, & Khairullayev Farrukh. (2023). THE BASICS OF BUILDING A TRAINING SESSION FOR YOUNG ATHLETES. *Conferencea*, 55–65. Retrieved from
25. Tuychiev Ashurali Ibragimovich. (2023). EXPERIMENTAL AND SEARCH WORK ON THE IMPLEMENTATION OF GAME TECHNOLOGY IN THE SYSTEM OF SUMMER RECREATION.
26. Tuychiyeva I., Hokimjonova M., Muqimova D. KOUCHING TEXNOLOGIYASI PEDAGOGIK KOMPETENTSIYANI OSHIRISH SHAKLI SIFATIDA //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – T. 2. – №. 12. – C. 1160-1165.
27. Tuychiyeva I., Jo'Rayeva S. OLIY TA'LIM SIFATINI OSHIRISHDA KREDIT-MODUL TIZIMINING AHAMIYATI //Science and innovation. – 2022. – T. 1. – №. B7. – C. 1349-1354.
28. Yakubova, G. (2021). Pedagogical valeology in the educational process of students of secondary educational institutions. *Asian Journal of Multidimensional Research*, 10(8), 199-204.
29. Yakubova, G. K. (2022). Pedagogical Factors Of Forming Youth's Healthy Lifestyle Through Physical Education. *Journal of Positive School Psychology*, 6(10), 2016-2020.
30. Якубова, Г. (2022, November). ЖИСМОНИЙ МАДАНИЯТ ВА СПОРТ МАШҒУЛОТЛАРИ ВАҚТИДА ОБҚАТЛАНИШ. In *E Conference Zone* (pp. 53-66).
31. Yakubova, G. (2021). Sports Medicine and Therapeutic Physical Education. *Texas Journal of Multidisciplinary Studies*, 2, 135-141.
32. Yakubova, G., & Alijonova, M. (2022). NAFAS OLIISH ORGANI KASALLIKLARI HAQIDA TUSHUNCHALAR VA UNDA DJT.
33. Qochqorovna, Y. G. (2022). YURAK QON-TOMIR KASALLIKLARINI DAVOLASH JISMONIY TARBIYASI. *Galaxy International Interdisciplinary Research Journal*, 10(9), 80-81.
34. Guyokhan, Y. (2022). Analysis of Movements During the Day. *Eurasian Medical Research Periodical*, 12, 49-52.
35. Guyokhon, Y., & Mahliyo, A. (2022). O'SMIR YOSHDAGI BOLALAR NAFAS OLIISH ORGANI KASALLIKLARINI JISMONIY TARBIYA VOSITALARI BILAN DAVOLASH. *Spectrum Journal of Innovation, Reforms and Development*, 8, 63-72.
36. Yuldashev, M., & Yakubova, G. (2022, October). ADAPTIV JISMONIY TARBIYADA QAYTA TIKLANISH (REABILITATSIYA). In *E Conference Zone* (pp. 14-17).
37. Guyokhon, Y. (2022, November). INFLUENCE OF METABOLIC THERAPY ON THE FUNCTIONAL STATE OF ATHLETES. In *E Conference Zone* (pp. 24-33).
38. Kuchkarovna, Y. G. Y. (2022). Bolalarda Bronxid Kasalligini Davolash Jismoniy Tarbiyasi. *Periodica Journal of Modern Philosophy, Social Sciences and Humanities*, 4, 1-4.

39. Yakubova, G. K. (2021). MONITORING OF PHYSICAL EDUCATION CLASSES IN CONDITIONS OF HYPERTHERMIA. *Herald pedagogiki. Nauka i Praktika, 1*(2)
40. Hamrakulov, R. (2021). PEDAGOGICAL BASES OF FORMATION OF PHYSICAL EDUCATION AND SPORTS TRAINING IN HIGHER EDUCATION SYSTEM. *47. Yuldashev, M, 102-107.*
41. Хамроқулов, Р., & Мамажонов, З. (2022). АКРОБАТИКА МАШҚЛАРИНИ ЎРГАТИШ УСУЛЛАРИ.
42. Rasuljon, X., & Qurvonoy, A. (2022, October). 5-6 SINF O 'QUVCHILARINING JISMONIY TAYYORGARLIKLARINI TAKOMILLASHTIRISHDA JISMONIY MASHQLARNING O 'RNI. In *E Conference Zone* (pp. 18-29).
43. Khamroqulov, R. (2022, June). INCREASE GIRLS'PHYSICAL STATUS THROUGH ACTION GAMES. In *E Conference Zone* (pp. 234-237).
44. Rasuljon, K., & Mukhtasarkhon, R. (2022). ACTION GAMES ARE A FACTOR THAT INCREASES THE PHYSICAL FITNESS AND HEALTH OF GIRLS. *American Journal of Interdisciplinary Research and Development, 9*, 11-20.
45. Rasul, H., & Shuhrat, N. (2022). CHANGES THAT OCCUR IN THE ORGANISM OF YOUNG PLAYERS UNDER THE INFLUENCE OF AGE CHARACTERISTICS AND THEIR PHYSICAL FITNESS. *American Journal of Interdisciplinary Research and Development, 9*, 1-10.
46. ABDUSATTAROVICH, K. R., & ALISHER, K. (2022, May). PLANNING OF THE EDUCATIONAL AND TRAINING PROCESS OF YOUNG ATHLETES DURING EXTRACURRICULAR ACTIVITIES. In *E Conference Zone* (pp. 27-31).
47. Rasul, H., & Zulfiyakhon, M. (2022). FEATURES AND IMPORTANCE OF ACROBATIC EXERCISES. *Spectrum Journal of Innovation, Reforms and Development, 8*, 31-39.
48. Rasuljon, K., & Nomozbek, M. (2022, November). EDUCATION AND DEVELOPMENT OF PHYSICAL QUALITIES OF YOUNG VOLLEYBALL PLAYERS THROUGH ACTIVE GAMES. In *E Conference Zone* (pp. 14-23).
49. Hamroqulov, R., & Nishonov, S. (2022). Methods of increasing physical faiths during the training of football players. *Texas Journal of Multidisciplinary Studies, 8*, 130-132.
50. Хамроқулов, Р., & Мухаммадов, Н. (2022). ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ СИФАТЛАРИНИ ВА ҲАРАКАТЛИ ЎЙИНЛАР РИВОЖЛАНТИРИШ. *World Scientific Research Journal, 2*(2), 185-192.