



# **METHODOLOGY FOR DEVELOPING TECHNICAL PREPARATION IN PARALYMPIC JUDO ATHLETES BASED ON THE REQUIREMENTS OF THE DEVELOPMENT STRATEGY**

Nazarova D. E.

Associate Professor of the Department of History, National Pedagogical University of Uzbekistan Named after Nizami Doctor of Philosophy (PhD) in Historical Sciences

Turgunov A. Z.

Master's student in the specialty "Theory and Methodology of Physical Education and Sports Training," National Pedagogical University of Uzbekistan Named after Nizami

## **Abstract**

This article examines the methodology for developing technical preparation in Paralympic judo athletes in accordance with the requirements of the Development Strategy, which prioritizes the expansion of inclusive sports, the improvement of adaptive training systems, and the strengthening of athletes' competitive capacity. In Paralympic judo, technical preparation is not limited to the mechanical acquisition of throws, grips, balance control, and transition movements, but also includes the adaptation of these elements to the functional abilities, sensory characteristics, and competitive conditions of athletes with visual impairments. The study is based on the idea that an effective methodology should combine pedagogical consistency, differentiated instruction, safety principles, and systematic progression from basic motor patterns to complex technical combinations. Particular attention is given to the role of specialized drills, tactile orientation, paired interaction, repeated situational practice, and correctional feedback in improving technical mastery. The article argues that the formation of technical preparation becomes more effective when training is organized through stage-based planning, individualized load distribution, and continuous



assessment of movement accuracy and stability. It is concluded that a scientifically grounded methodology for technical preparation in Paralympic judo contributes to higher performance quality, greater training efficiency, and broader realization of strategic objectives related to inclusive physical culture and sports development.

**Keywords.** Paralympic judo, technical preparation, training methodology, adaptive sports, inclusive education, motor skills, tactile orientation, competitive performance, differentiated instruction, sports training, movement coordination, athlete development.

## **Introduction**

### **TARAQQIYOT STRATEGIYASI TALABLARI ASOSIDA PARAOLIMPIYA DZYUDOKHILARDA TEXNIK TAYYORGARLIKNI SHAKLLANTIRISH METODIKASI**

Nazarova Dilnoza Eraliyevna

Nizomiy nomidagi O'zbekiston milliy pedagogika universiteti tarix  
kafedrasi dotsenti, tarix fanlari falsafa doktori (PhD)

Turg'unov Anvar Zokir o'g'li

Nizomiy nomidagi O'zbekiston milliy pedagogika universiteti "Jismoniy  
tarbiya va sport mashg'ulotlari nazariyasi va metodikasi" yo'nalishi magistranti

## **Annotatsiya**

Mazkur maqolada taraqqiyot strategiyasi talablari asosida paraolimpiya dzyudochilarda texnik tayyorgarlikni shakllantirish metodikasi tahlil qilinadi. Taraqqiyot strategiyasida inklyuziv sportni kengaytirish, adaptiv mashg'ulot tizimlarini takomillashtirish hamda sportchilarning musobaqaviy salohiyatini oshirish ustuvor vazifalar sifatida belgilanganligi sababli, paraolimpiya dzyudosida texnik tayyorgarlik masalasi alohida ilmiy-amaliy ahamiyat kasb etadi. Ushbu sport turida texnik tayyorgarlik faqatgina usullarni mexanik ravishda egallash bilan cheklanmay, balki ko'rishida nuqsoni bo'lgan sportchilarning funksional imkoniyatlari, sezgi xususiyatlari va musobaqa sharoitlariga moslashtirilgan holda shakllantirilishini talab etadi. Tadqiqotda



samarali metodika pedagogik izchillik, differensial yondashuv, xavfsizlik tamoyillari hamda oddiy harakatlardan murakkab texnik kombinatsiyalarga bosqichma-bosqich o'tish asosida qurilishi lozimligi asoslab beriladi. Shuningdek, maxsus mashqlar, taktil orientatsiya, juftlikdagi o'zaro hamkorlik, vaziyatli takroriy mashg'ulotlar va tuzatish xarakteridagi teskari aloqaning texnik mahoratni oshirishdagi o'rni yoritiladi. Maqolada texnik tayyorgarlikni shakllantirish bosqichli rejalashtirish, individual yuklama taqsimoti va harakat aniqligi hamda barqarorligini muntazam baholab borish asosida tashkil etilganda yuqori samaradorlikka erishilishi ta'kidlanadi. Xulosa sifatida paraolimpiya dzyudoda texnik tayyorgarlikning ilmiy asoslangan metodikasi sport natijadorligini oshirish, mashg'ulot jarayoni sifatini yaxshilash va inklyuziv jismoniy tarbiya hamda sportni rivojlantirishga doir strategik maqsadlarni amalga oshirishga xizmat qilishi ko'rsatib beriladi.

**Kalit so'zlar.** paraolimpiya dzyudo, texnik tayyorgarlik, o'qitish metodikasi, adaptiv sport, inklyuziv ta'lim, harakat ko'nikmalari, taktil orientatsiya, musobaqa natijadorligi, differensial yondashuv, sport mashg'uloti, harakat koordinatsiyasi, sportchi rivojlanishi

## **Introduction**

The development of Paralympic sport has become an important direction in contemporary physical culture, educational policy, and social inclusion. Within this context, Paralympic judo occupies a special place because it combines high athletic demands with the need for adapted pedagogical methods that reflect the functional characteristics of athletes with visual impairments. In recent years, the strategic modernization of sport has increasingly emphasized equal access to training opportunities, the improvement of competitive preparation, and the creation of scientifically grounded methods for athletes representing different social groups. Against this background, the methodology for developing technical preparation in Paralympic judo athletes gains particular significance, since technical mastery forms the basis for effective performance, tactical realization, and long-term athletic growth.

Technical preparation in judo traditionally includes the formation of grips, stance stability, body positioning, throwing actions, transition techniques, balance



control, and coordinated movement in direct interaction with an opponent. However, in Paralympic judo these elements acquire additional pedagogical complexity. Athletes with visual impairments do not rely primarily on visual information when performing or correcting movements. Instead, they depend more strongly on tactile feedback, proprioceptive sensitivity, vestibular balance, muscular memory, and auditory guidance. As a result, the training methodology used for such athletes must be differentiated, adaptive, and carefully structured according to their sensory and motor needs. This means that technical preparation cannot be copied directly from general judo practice without methodological transformation.

The relevance of the present topic is also connected with the broader requirements of the Development Strategy, which gives considerable attention to strengthening inclusive sport, improving the quality of athlete preparation, and increasing the social and educational value of physical culture. In this framework, Paralympic judo is viewed not only as a competitive sport but also as a sphere for the realization of human potential, self-confidence, discipline, resilience, and active participation in public life. Therefore, the quality of methodological support in training has implications beyond sports results alone. It influences the personal development of the athlete, the efficiency of pedagogical work, and the practical implementation of strategic goals in the field of adaptive sport.

A major challenge in technical preparation for Paralympic judo lies in the need to combine safety and effectiveness. Any teaching methodology must ensure that athletes gradually master movement structures without excessive physical or psychological overload. This requires stage-by-stage instruction, repeated situational practice, individual correction, partner-based exercises, and the development of stable motor stereotypes. Since Paralympic judo athletes often perform under specific competitive rules related to starting grips and close-contact orientation, technical preparation must also be aligned with actual competition conditions. In other words, training should reproduce the sensory and tactical realities of the contest environment.

Another important consideration is that technical preparation is the foundation upon which other aspects of sports mastery are built. Without accurate and stable technique, it is difficult to develop tactical thinking, speed of reaction, confidence in movement, and consistency in competitive performance. For this reason, the



formation of technical readiness should be regarded as a central component of long-term preparation. A scientifically based methodology can improve movement precision, reduce technical errors, strengthen coordination, and increase the athlete's ability to adapt to complex situations during matches.

Thus, the study of methodological foundations for developing technical preparation in Paralympic judo athletes is both timely and necessary. It reflects the intersection of sports pedagogy, adaptive training, and strategic priorities aimed at improving the quality and inclusiveness of modern sport.

## **Methods**

This study was designed on the basis of a pedagogical and methodological approach aimed at identifying effective ways to develop technical preparation in Paralympic judo athletes under the requirements of the Development Strategy. The methodological framework combined theoretical analysis, pedagogical observation, comparative interpretation, and systematization of adaptive training principles used in sports practice for athletes with visual impairments. The central purpose of the research methods was to determine how technical skills in Paralympic judo can be formed through scientifically organized instruction that reflects the sensory, motor, and competitive characteristics of the athletes.

The first method used in the study was theoretical analysis of scientific and methodological literature devoted to sports pedagogy, adaptive physical education, judo training, Paralympic sports preparation, and differentiated teaching technologies. Special attention was given to materials related to movement learning, motor coordination, tactile orientation, technical skill acquisition, stage-by-stage sports preparation, and correctional pedagogy in adaptive environments. Through this analysis, the study identified the main conceptual categories necessary for building an effective methodology, including individualization, accessibility, progressive complexity, repetition, feedback, safety, and functional adaptation. These concepts formed the theoretical basis for interpreting technical preparation not merely as physical repetition, but as a structured pedagogical process.

The study also relied on pedagogical observation as an important methodological tool. Observation was used to examine the process through which Paralympic judo athletes acquire and refine technical elements during training sessions. This



method made it possible to analyze the practical difficulties that emerge in the execution of grips, balance control, body alignment, throwing initiation, defensive positioning, and transition techniques. Since visual impairment changes the athlete's dominant channels of perception, observation focused on how coaches organize verbal explanation, tactile demonstration, partner interaction, and corrective assistance. It also allowed the identification of common technical errors and the conditions under which movement precision becomes more stable.

Another important method applied in the study was comparative analysis. This method was used to compare conventional judo teaching practices with adapted approaches required in Paralympic judo. Through comparison, the research clarified which components of traditional methodology remain effective and which must be transformed according to the needs of athletes with visual impairments. For example, while repetition and technical sequencing remain universal pedagogical principles, the means of orientation, instruction, correction, and movement initiation differ considerably. Comparative analysis also helped distinguish between methods that produce short-term imitation and those that support stable technical mastery under actual competition conditions.

The method of pedagogical modeling was employed to describe the structure of a rational training process for technical preparation. On the basis of this method, technical development was represented as a sequence of interconnected stages. The first stage included the formation of basic postural stability, spatial confidence, grip familiarity, and simple movement patterns. The second stage focused on the acquisition of core technical actions such as controlled pulling, balance disruption, simplified throwing entries, and safe falling technique. The third stage involved the integration of technical elements into paired drills, situational tasks, and stable movement combinations. The final stage emphasized the adaptation of techniques to competitive tempo, opposition pressure, and tactical variability. Pedagogical modeling allowed these stages to be organized into a coherent methodological scheme consistent with the requirements of adaptive sports training.

The study further used the method of functional analysis to understand the role of technical preparation within the broader system of Paralympic judo development. Through this method, technical preparation was examined in



relation to physical readiness, coordination, psychological confidence, tactical thinking, and competitive reliability. This analytical perspective showed that technique is not an isolated component but a functional core that connects all other elements of sports mastery. It also demonstrated that deficiencies in technical preparation often reduce the effectiveness of physical fitness and tactical planning, especially in a sport based on close-contact interaction and instant motor response.

General scientific methods such as synthesis, classification, and logical generalization were also applied throughout the study. These methods supported the grouping of technical teaching principles into major categories such as accessibility, adaptation, sequence, safety, repetition, and correction. As a result, the methodological design of the research made it possible to present technical preparation in Paralympic judo as a purposeful and pedagogically regulated process. The study therefore establishes that effective methodology must be based on differentiated instruction, progressive task organization, tactile and verbal guidance, and continuous control over movement quality in training conditions that correspond to the real demands of competition.

## **Results**

The analysis of methodological approaches to technical preparation in Paralympic judo athletes showed that the effectiveness of training increases considerably when technical development is organized through adaptive, stage-based, and athlete-centered instruction. The obtained results indicate that technical mastery in Paralympic judo is formed most successfully when the teaching process reflects the specific perceptual characteristics of athletes with visual impairments and does not rely on standard visual demonstration as the primary means of instruction. Instead, the use of tactile guidance, repeated paired practice, verbal precision, and controlled motor correction creates more stable movement patterns and improves the accuracy of technical execution.

One of the main results of the study is that technical preparation becomes more productive when basic movement elements are mastered before complex combinations are introduced. Athletes who first develop stable posture, balanced stance, safe body orientation, grip confidence, and elementary displacement skills demonstrate greater consistency in the later acquisition of throws, defensive



actions, and transition techniques. This confirms that the methodology of technical preparation must be based on progression from simple to complex, with each new movement component connected to previously formed motor experience. When this sequence is not respected, technical errors tend to accumulate, and the athlete experiences greater difficulty in maintaining coordination under dynamic contact conditions.

The results also revealed that tactile orientation plays a decisive role in the formation of technical readiness. In Paralympic judo, athletes receive a significant part of competitive information through physical contact with the opponent. For this reason, the training process becomes more effective when athletes repeatedly practice grip-based interaction, pressure recognition, force direction, and balance response in close-contact situations. These exercises improve proprioceptive sensitivity and help athletes anticipate the opponent's movement intentions more accurately. As a result, the execution of techniques becomes less mechanical and more responsive to real contest conditions. This finding shows that tactile and kinesthetic channels should occupy a central place in the methodology of technical training.

Another important result concerns the value of differentiated instruction. The study found that athletes differ in the speed of technical assimilation, in the stability of balance reactions, in motor memory, and in their ability to transfer learned skills from isolated drills to situational practice. Therefore, a uniform approach does not provide the highest training effect. Better results are achieved when technical tasks are adjusted according to the athlete's level of preparation, sensory adaptation, confidence, and functional ability. Individualized correction, flexible tempo of instruction, and variable drill complexity contribute to stronger technical consolidation and reduce the risk of overload or discouragement in the learning process.

The research further demonstrated that repeated situational practice significantly improves the transfer of learned techniques into competitive performance. When athletes perform technical actions only in simplified or static drills, the level of execution often decreases under competitive pressure. However, when the methodology includes partner resistance, changing grip situations, directional variation, and controlled tactical tasks, athletes begin to perform techniques with greater reliability and stability. This shows that technical preparation in



Paralympic judo should not end with the mechanical mastery of isolated actions. It must extend to situational adaptability, rhythm control, and the ability to preserve correct technique under changing interaction conditions.

The study also established that correctional feedback has a major influence on technical improvement. Verbal explanation alone is often insufficient for ensuring full understanding of movement structure. More effective results are observed when explanation is supported by tactile demonstration, guided execution, and immediate correction of body position, direction, and timing. Such feedback helps athletes build more accurate motor images and reduce persistent errors. In addition, the use of regular pedagogical control allows coaches to monitor movement quality and identify weaknesses before they become stable habits.

In general, the results confirm that the methodology for developing technical preparation in Paralympic judo athletes is most effective when it integrates staged progression, tactile orientation, differentiated instruction, situational training, and continuous corrective feedback. These elements strengthen movement accuracy, increase stability of technique, and create the pedagogical conditions necessary for improving competitive preparedness in accordance with the strategic aims of modern inclusive sport development.

## **Discussion**

The results of the study make it possible to state that the methodology for developing technical preparation in Paralympic judo athletes should be viewed as a specialized pedagogical system rather than a simplified version of conventional judo instruction. In practice, Paralympic judo requires a different logic of movement teaching because athletes with visual impairments perceive competitive situations through tactile contact, proprioceptive response, vestibular control, and verbal guidance more than through visual observation. This means that technical preparation must be built on adaptive principles that correspond to the real mechanisms through which movement is learned, corrected, stabilized, and applied during contest situations. The discussion of the findings therefore highlights the importance of methodological transformation in the teaching process.

One of the central issues revealed by the analysis is the decisive role of stage-based instruction. Technical development in Paralympic judo becomes more



effective when the athlete first acquires basic balance, stance, grip orientation, and controlled displacement before progressing to complex throws and transitions. This confirms a general pedagogical principle that complex motor acts cannot be reliably formed without a stable foundation of simpler coordinated actions. In adaptive sport, this principle becomes even more important because insufficient mastery of elementary technical structure increases the risk of disorientation, instability, and execution errors. Therefore, the stage-based model is not only methodologically convenient but functionally necessary for ensuring safe and productive learning.

The discussion also shows that tactile orientation should be regarded as a core methodological category in Paralympic judo. In this sport, physical contact is not merely a moment of engagement with the opponent; it is also a source of spatial, dynamic, and tactical information. Athletes learn to interpret the pressure of grip, shifts in balance, direction of force, and moment of attack through direct bodily interaction. Consequently, the methodology of technical preparation must place tactile learning at the center of the training process. This changes the teacher's role as well. The coach is required not only to explain and demonstrate, but also to organize exercises that allow the athlete to feel movement structure, resistance, timing, and positional change in a controlled and repeatable way. Such a role demands higher pedagogical sensitivity and a more individualized mode of instruction.

Another important point concerns the significance of differentiated teaching. The findings indicate that athletes vary in their sensory adaptation, speed of technical assimilation, emotional stability, and capacity to transfer learned actions into competitive contexts. This means that uniform instruction limits the effectiveness of training. A more productive methodology involves adjusting task complexity, repetition volume, correction style, and learning tempo according to the individual profile of the athlete. From a pedagogical perspective, this supports more stable skill acquisition and reduces the risk of both overload and mechanical repetition without understanding. In this sense, differentiation is not simply an additional teaching principle but one of the main conditions for methodological efficiency in Paralympic judo.

The study also invites discussion about the relationship between technique and broader goals of the Development Strategy. Technical preparation in Paralympic



judo should not be interpreted only in terms of sport result. It also contributes to confidence, independence, discipline, self-regulation, and fuller inclusion in social and educational life. When technical mastery improves, the athlete gains greater control over movement, stronger readiness for competition, and more active participation in organized sport. This gives the methodology a broader social and educational function. It becomes a means of implementing strategic priorities related to inclusive development, equal opportunity, and the expansion of high-quality adaptive sport.

Overall, the discussion confirms that effective technical preparation in Paralympic judo depends on a scientifically organized methodology that combines adaptation, sequencing, tactile learning, differentiation, and situational practice. These elements allow technical skill to develop in a stable and meaningful way, while also supporting the wider strategic objectives of contemporary sports education and inclusive athletic advancement.

## **Conclusion**

The present study confirms that the methodology for developing technical preparation in Paralympic judo athletes should be regarded as a strategically important direction in modern sports pedagogy and adaptive physical education. Technical preparation in this sport is not limited to the acquisition of isolated movements or standard competitive actions. It represents a systematic pedagogical process aimed at forming stable motor skills, sensory adaptation, movement confidence, and reliable execution under conditions of close-contact interaction. Because Paralympic judo athletes with visual impairments rely primarily on tactile, proprioceptive, and vestibular information, their technical preparation must be organized through specialized methodological principles that differ from traditional approaches used in general judo training.

The study has shown that effective technical preparation depends on several interconnected conditions. First, the training process must be built on staged progression, beginning with the development of posture, balance, grip stability, body orientation, and elementary movement coordination. Only after these foundations are formed can athletes effectively master more complex throws, transitions, defensive responses, and technical combinations. Second, tactile orientation must occupy a central place in the methodology, since physical



contact serves as the main channel through which the athlete perceives the opponent, controls distance, responds to force direction, and makes immediate technical decisions. Third, differentiated instruction is essential because Paralympic athletes vary in movement experience, sensory adaptation, confidence, and technical learning tempo. Individualization therefore becomes a necessary condition for sustainable skill formation.

Another significant conclusion is that the methodological quality of training directly influences competitive reliability. When technical skills are taught through repeated situational drills, guided correction, partner interaction, and realistic contest-based tasks, the athlete develops not only mechanical accuracy but also the ability to preserve technique in dynamic and unpredictable circumstances. This is especially important in Paralympic judo, where success depends on the capacity to react instantly to physical contact and maintain technical stability under pressure. Accordingly, technical preparation should be understood as the functional foundation of tactical activity, movement economy, and overall sports mastery.

The research also makes it clear that the role of technical preparation extends beyond purely athletic performance. In the context of the Development Strategy, which emphasizes inclusive sports, equal opportunity, and the expansion of quality training systems, Paralympic judo becomes a sphere for broader social and pedagogical realization. Properly organized technical training strengthens self-confidence, discipline, independence, and active participation in the sporting environment. Thus, the improvement of methodology contributes not only to competition results but also to the wider strategic goals of inclusive development and human potential formation.

In general, the methodology for developing technical preparation in Paralympic judo athletes should be based on scientific planning, adaptive pedagogy, safety, continuity, and practical relevance to competitive conditions. Its effectiveness is achieved through the rational combination of tactile learning, staged instruction, individualized correction, and repeated situational application. Therefore, the formation of technical preparation in Paralympic judo must be recognized as a core pedagogical task that supports athletic success, educational value, and the implementation of strategic priorities in the development of modern adaptive sport.

## References:

1. O‘zbekiston Respublikasi Prezidenti (2022). “Yangi O‘zbekistonning 2022–2026-yillarga mo‘ljallangan taraqqiyot strategiyasi to‘g‘risida” Farmoni. Toshkent.
2. O‘zbekiston Respublikasi Prezidenti (2019). “Maktab yoshidagi bolalarda jismoniy tarbiya va sportni rivojlantirish chora-tadbirlari to‘g‘risida” Qarori. Toshkent.
3. O‘zbekiston Respublikasi Prezidenti (2021). “O‘zbekiston Respublikasida sog‘lom turmush tarzini targ‘ib qilish va sportni rivojlantirish bo‘yicha kompleks dastur to‘g‘risida” Farmoni. Toshkent.
4. Raximovich, R. U., & Farxodjon o‘g‘li, A. Y. (2024). YENGIL ATLETIKA SPORT TURIDA OZIQ-OVQAT REJIMI VA UNING ILMIY TAHLILI. MODELS AND METHODS FOR INCREASING THE EFFICIENCY OF INNOVATIVE RESEARCH, 4(40), 22-25.
5. Ўигиталиев, А. (2024). ФИЗИЧЕСКАЯ ПОДГОТОВКА В СПОРТИВНОЙ ШКОЛЕ ПО ЛЁГКОЙ АТЛЕТИКЕ. Академические исследования в современной науке, 3(23), 193-196.
6. Ugli, Y. A. F. (2022). CONDITIONS OF USE OF INNOVATIVE EDUCATIONAL TECHNOLOGIES IN PROFESSIONAL TRAINING OF FUTURE SPECIALISTS IN THE FIELD OF PHYSICAL EDUCATION. In ONLINE-CONFERENCES" PLATFORM (pp. 89-91).
7. Yigitaliyev, A. F., & Rasulova, R. A. (2024). YOSHLARNI SOG‘LOM VOYAGA YETISHLARINI TA‘MINLASH MASALASI XALQ OG‘ZAKI IJODIDA. SO ‘NGI ILMIY TADQIQOTLAR NAZARIYASI, 7(6), 49-51.
8. Yigitaliyev, A. F. O. G. L. (2023). QISQA MASOFAGA YUGURUVCHI SPORTCHILARNI MASHG‘ULOTLARINI TASHKIL QILISH USULLARI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 3(12), 277-280.
9. Radjapov, U., & Abubakir, Y. (2024). O ‘QUVCHILARDA SOGLOM TURMUSH TARZINI SHAKLLANTIRISHDA UMUMRIVOJLANTIRUVCHI MASHQLAR VA ULARNI O‘TKAZISH. *Международный журнал теории новейших научных исследований*, 2(9), 131-135.



10. Radjapov, U., & Yigitaliyev, A. (2025). FOOD PRACTICES IN ATHLETICS: A SCIENTIFIC ANALYSIS. ВЕСТНИК МАГИСТРАТУРЫ, 28.
11. Farxodjon o'g'li, Y. A. QISQA MASOFAGA YUGURUVCHI SPORTCHILARNI MASHG'ULOTLARINI TASHKIL QILISH USULLARI.