Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

FORMATION OF TECHNICAL AND TACTICAL PREPAREDNESS OF STUDENTS IN VOLLEYBALL CLASSES THROUGH GAME-BASED EXERCISES

Xolmirzayev Azizbek Nabijonovich
Andijan State Pedagogical Institute
Trainee teacher of the Department of Physical Culture

Abstract: The article examines the formation of students' technical and tactical preparedness in volleyball classes through the systematic use of game-based exercises. In pedagogical higher education, volleyball is not only a means of physical development, but also an effective educational tool for improving coordination, teamwork, quick decision-making, communicative interaction and competitive thinking. The study emphasizes that technical skills such as serving, passing, setting, attacking, blocking and defensive actions become more stable and practically applicable when they are developed in conditions close to real game situations. Game-based exercises help students master tactical thinking, positional movement, cooperation in attack and defense, and the ability to respond flexibly to changing match conditions. The article substantiates the importance of organizing volleyball lessons on the basis of gradual complication, situational modeling, team interaction and reflective analysis. The proposed approach contributes to the improvement of students' motor activity, sports motivation, methodological competence and readiness to apply volleyball exercises in future pedagogical practice.
Keywords: volleyball, technical preparedness, tactical preparedness, game-based exercises, physical education, student sport, pedagogical university, motor skills, team interaction, sports training

TALABALARNING VOLEYBOL MASHG'ULOTLARIDA O'YINLI MASHQLAR VOSITASIDA TEXNIK-TAKTIK TAYYORGARLIGINI SHAKLLANTIRISH

Xolmirzayev Azizbek Nabijonovich
Andijon davlat pedagogika instituti
Jismoniy madaniyat kafedrasi stajyor o'qituvchisi

Annotatsiya: Maqolada voleybol mashg'ulotlarida talabalarni texnik va taktik jihatdan tayyorlash jarayonini o'yinli mashqlar orqali shakllantirish masalasi yoritiladi. Pedagogik oliy ta'lim muassasalarida voleybol nafaqat jismoniy rivojlanish vositasi, balki koordinatsiya, jamoaviy harakat, tezkor qaror qabul qilish, muloqot madaniyati va musobaqaviy fikrlashni rivojlantiruvchi samarali pedagogik vosita sifatida qaraladi. Tadqiqotda to'pni uzatish, qabul qilish, oshirish, hujum zarbasi, to'siq qo'yish va himoyaviy harakatlar kabi texnik ko'nikmalar real o'yin vaziyatlariga yaqin sharoitlarda shakllantirilganda yanada barqaror va amaliy ahamiyatga ega bo'lishi asoslanadi. O'yinli mashqlar talabalarni taktik fikrlashga, maydonda to'g'ri

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

joylashishga, hujum va himoyada hamkorlik qilishga hamda o‘zgaruvchan o‘yin sharoitlariga moslashishga o‘rgatadi. Maqolada voleybol darslarini bosqichma-bosqich murakkablashtirish, vaziyatli modellashtirish, jamoaviy hamkorlik va refleksiv tahlil asosida tashkil etishning ahamiyati ochib beriladi.
Kalit so‘zlar: voleybol, texnik tayyorgarlik, taktik tayyorgarlik, o‘yinli mashqlar, jismoniy tarbiya, talabalar sporti, pedagogik universitet, harakat ko‘nikmalari, jamoaviy hamkorlik, sport tayyorgarligi.

Introduction

Volleyball occupies an important place in the system of physical education at pedagogical universities because it combines physical, technical, tactical, psychological and social components of student development. Unlike many forms of physical activity that are based mainly on individual motor actions, volleyball requires constant interaction among players, quick orientation in changing situations, accurate coordination of movements and the ability to make collective decisions under time pressure. For future teachers and physical education specialists, mastering volleyball is significant not only from the point of view of personal physical preparedness, but also as a methodological resource that can later be used in school, college and university practice. Therefore, the organization of volleyball classes in higher pedagogical education should be directed not merely toward the mechanical repetition of separate technical elements, but toward the formation of stable technical and tactical preparedness in conditions close to real play.

Technical preparedness in volleyball includes the student’s ability to perform basic motor actions correctly, efficiently and consistently. These actions include serving, receiving the ball, passing, setting, attacking, blocking, defensive movement and court positioning. However, technical mastery cannot be fully developed if exercises are isolated from the logic of the game. A student may learn how to pass or serve in a simplified drill, but may experience difficulty when the same action must be performed during an actual rally, while moving, communicating with teammates and responding to the opponent’s actions. This shows the need to connect technical training with tactical content from the early stages of instruction. Tactical preparedness, in turn, refers to the ability to choose appropriate actions depending on the game situation, understand team roles, anticipate the opponent’s behavior and coordinate individual actions with the general strategy of the team.

Game-based exercises are especially effective in solving this pedagogical problem because they create conditions in which technical and tactical elements are developed simultaneously. Through modified games, situational tasks, small-sided volleyball, competitive relays and role-based exercises, students learn to apply techniques purposefully rather than formally. Such exercises increase emotional involvement, strengthen motivation and help students understand the practical meaning of each technical action. For example, a passing exercise becomes more meaningful when it is connected with the task of organizing an attack, and a defensive movement becomes more effective when the student understands its role in maintaining team balance and preparing for counterattack.

In the context of Uzbekistan, the development of student sport and the improvement of physical education in higher education institutions require modern, active and practice-oriented teaching methods. Pedagogical universities need approaches that prepare future teachers to conduct engaging, safe and methodically correct volleyball lessons. Game-based exercises correspond to these requirements because they allow the teacher to adapt the lesson to students’ different levels of physical fitness, technical experience and learning pace. They

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

also support cooperation, discipline, responsibility and communicative culture, which are essential qualities for future pedagogical activity.

The relevance of this topic is determined by the need to improve the quality of volleyball instruction through methods that integrate movement practice, tactical thinking and pedagogical reflection. The formation of technical and tactical preparedness through game-based exercises enables students to understand volleyball as a dynamic educational process, where physical skill, intellectual decision-making and team interaction are inseparably connected.

Methods

The methodological basis of the study is formed by a pedagogical approach aimed at determining how game-based exercises influence the development of students' technical and tactical preparedness in volleyball classes. The research was designed for the conditions of a pedagogical university where students study physical education and sport-related disciplines and are expected not only to improve their own motor skills, but also to master methods of organizing volleyball lessons for future professional practice. The study was based on the integration of theoretical analysis, pedagogical observation, practical volleyball training, diagnostic assessment and comparative evaluation of students' progress during the educational process.

At the initial stage, scientific and methodological literature on volleyball training, physical education, sports pedagogy, technical skill formation and tactical thinking was analyzed. This made it possible to clarify the key concepts of technical preparedness, tactical preparedness and game-based exercise. Technical preparedness was understood as the ability to perform volleyball techniques accurately, rationally and consistently in different playing conditions. Tactical preparedness was considered as the ability to select appropriate individual and team actions depending on the position of the ball, the movement of partners and opponents, and the changing structure of the rally. Game-based exercises were defined as specially organized motor tasks that preserve the logic, emotional intensity and situational variability of the volleyball game while being adapted to the educational level of students.

The practical part of the study was organized during volleyball classes. Students' initial level of preparedness was assessed through observation of basic technical actions, including overhead pass, forearm pass, serve, attacking movement, blocking imitation, defensive movement and court positioning. Special attention was paid not only to the mechanical correctness of performance, but also to the ability to apply these actions in changing game situations. For this purpose, simplified volleyball games, two-against-two and three-against-three formats, limited-touch exercises, serve-receive tasks, attack organization drills and defensive transition tasks were used. These forms allowed the teacher to observe how students connected technical execution with tactical decision-making.

The training process was built on the principle of gradual complication. At the first stage, students performed simplified game-based exercises focused on the correct execution of separate elements in pairs and small groups. At the second stage, technical actions were included in short tactical combinations, such as reception-setting-attack, serve-receive-transition and defense-counterattack. At the third stage, students participated in modified games where they had to independently choose positions, communicate with teammates, organize attack and defense, and correct mistakes during play. This sequence helped students move from isolated motor action to conscious tactical behavior.

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

Pedagogical observation was used throughout the lessons to identify students' progress, typical mistakes and changes in their interaction within the team. The teacher evaluated accuracy of passing, stability of serving, readiness for defensive actions, ability to move without the ball, communication during rallies and tactical adequacy of decisions. In addition, reflective discussions were organized after selected exercises. During these discussions, students analyzed why a particular action was successful or unsuccessful, how team positioning influenced the result, and what tactical alternative could have been chosen.

The effectiveness of the method was assessed by comparing students' initial and final performance indicators. The main criteria included technical accuracy, tactical awareness, stability of actions in game conditions, cooperation with teammates, activity during lessons and ability to explain the methodological purpose of selected exercises. Such an approach made it possible to evaluate not only sports performance, but also students' pedagogical readiness to use game-based volleyball exercises in their future professional activity.

Results

The results of the study showed that the systematic use of game-based exercises in volleyball classes had a positive influence on the formation of students' technical and tactical preparedness. At the beginning of the training process, many students were able to perform separate technical elements only in simplified conditions, but they experienced difficulties when these elements had to be applied during a real or modified game situation. Typical problems included unstable ball reception, inaccurate passing under movement, weak coordination between players, late reaction to the opponent's actions, insufficient court vision and limited understanding of tactical roles. These difficulties demonstrated that traditional repetition of isolated techniques was not sufficient for the development of complete volleyball preparedness.

After the introduction of game-based exercises, students gradually began to connect technical actions with their tactical purpose. The overhead pass and forearm pass became more accurate when students performed them not as separate movements, but as elements of organizing an attack or maintaining the rally. Serve reception improved because students learned to assess the direction and speed of the ball, choose the correct position and communicate with teammates before the ball crossed the net. Serving also became more purposeful: students began to understand that the serve is not only the beginning of the rally, but also a tactical action aimed at creating difficulties for the opposing team. As a result, their attitude toward each technical element became more conscious and goal-oriented.

A noticeable improvement was observed in students' movement on the court. At the initial stage, many students remained static after performing one action and did not always return to a ready position. In game-based exercises, especially in small-sided formats such as two-against-two and three-against-three, every student was forced to participate actively in each rally. This increased their responsibility for court coverage, defensive movement and transition from defense to attack. Students became more attentive to free zones, partner positions and possible directions of the opponent's attack. The use of modified games with limited touches also encouraged quicker decision-making and better anticipation of the next action.

The tactical preparedness of students improved through repeated participation in situational exercises. They learned to identify simple tactical patterns, such as preparing an attack after reception, covering the attacker, moving to defensive zones after serving and supporting a teammate during a difficult ball. Team cooperation became more organized because students began to use verbal and non-verbal communication more actively.

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

They called for the ball, warned partners about free zones, coordinated reception and discussed tactical mistakes after rallies. This had a positive effect not only on the quality of play, but also on the social and communicative atmosphere of the lesson.

The results also showed an increase in students' motivation and emotional involvement. Game-based exercises created a competitive and dynamic environment, which made volleyball classes more engaging than repetitive drills. Even students with lower initial preparedness participated more actively because modified games allowed the teacher to regulate difficulty, reduce fear of mistakes and create equal opportunities for involvement. The gradual complication of tasks helped students experience success and understand their own progress.

From the pedagogical point of view, students developed a better understanding of how volleyball exercises can be used in future teaching practice. They were able to explain the methodological purpose of selected game-based tasks, identify which technical or tactical skill each exercise developed, and suggest ways to adapt the exercise for learners with different levels of preparedness. Therefore, the results confirm that game-based exercises contribute not only to the improvement of volleyball performance, but also to the formation of students' professional and methodological competence as future physical education teachers.

Discussion

The results obtained in the study confirm that game-based exercises are an effective pedagogical means for developing students' technical and tactical preparedness in volleyball classes. The main advantage of this approach is that it brings the training process closer to the real structure of volleyball activity. In traditional teaching, technical elements are often practiced separately from tactical situations, and this can lead to a gap between correct performance in drills and effective performance during the game. A student may know how to pass, serve or attack in a controlled exercise, but may not be able to use the same skill successfully when there is movement, time pressure, communication with teammates and opposition from the other side of the net. Game-based exercises help overcome this gap because they require students to perform technical actions in meaningful and variable situations.

The formation of technical preparedness through game-based exercises is especially important because volleyball techniques are not isolated motor acts. Each technical action has a tactical function. A serve should create difficulty for the opponent; a reception should prepare conditions for attack; a set should support the most effective attacking option; defensive movement should preserve the possibility of counterattack. When students understand this relationship, their performance becomes more conscious and purposeful. They begin to see technique not only as a correct body movement, but as a tool for solving a game task. This is a significant methodological outcome because future physical education teachers must be able to explain the practical meaning of exercises to learners, not merely demonstrate movements.

The development of tactical preparedness is also closely connected with the use of situational and competitive tasks. Volleyball requires constant analysis of the ball trajectory, partner positions, opponent movement and available space on the court. These skills cannot be fully formed through passive instruction or mechanical repetition. They require repeated participation in changing game conditions. Small-sided games, limited-touch tasks and role-based exercises increase the number of contacts with the ball, intensify decision-making and

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

create more opportunities for tactical learning. In such conditions, students are forced to think quickly, communicate clearly and adjust their actions according to the needs of the team.

Another important aspect is the motivational value of game-based exercises. In pedagogical practice, students' interest in physical education often depends on the emotional richness and practical relevance of the lesson. Game-based volleyball tasks create a natural competitive atmosphere and encourage active participation. They reduce monotony, support cooperation and allow students with different levels of preparedness to be involved in the learning process. When the teacher modifies the size of the court, number of players, number of touches, scoring rules or tactical restrictions, the same exercise can be adapted for beginners and more prepared students. This makes the method flexible and suitable for pedagogical university conditions.

The discussion of the results also shows that game-based exercises contribute to the formation of professional competence. Future teachers should not only perform volleyball techniques, but also understand how to select, organize and evaluate exercises in accordance with educational objectives. Through reflective analysis after game tasks, students learn to identify typical mistakes, explain tactical alternatives and connect practical activity with methodological reasoning. This strengthens their readiness to organize volleyball lessons in schools and higher education institutions.

At the same time, the effectiveness of game-based exercises depends on correct pedagogical planning. If such exercises are used without clear objectives, they may turn into ordinary play and lose their educational value. Therefore, each task should be connected with a definite technical or tactical aim, such as improving reception accuracy, developing court positioning, strengthening communication, organizing attack or improving defensive transition. The teacher must regulate intensity, observe students' actions, correct mistakes and ensure that the game situation serves the learning goal. Thus, game-based exercises should be regarded not as entertainment, but as a structured pedagogical technology for forming technical, tactical and methodological preparedness in volleyball classes.

Conclusion

The formation of technical and tactical preparedness of students in volleyball classes through game-based exercises is an important direction for improving the quality of physical education in pedagogical universities. The study showed that volleyball training becomes more effective when technical elements are not taught only through isolated repetition, but are included in meaningful game situations. In this case, students do not simply memorize separate movements; they learn to use them purposefully in accordance with the logic of the game, the position of teammates, the actions of opponents and the changing conditions of each rally. This approach strengthens the connection between motor performance, tactical thinking and team interaction.

Game-based exercises create favorable pedagogical conditions for mastering the main volleyball techniques, including serving, receiving, passing, setting, attacking, blocking and defensive movement. Their effectiveness lies in the fact that each technical action is performed in a practical context. Students gradually understand that every movement in volleyball has a tactical meaning. A pass is connected with the organization of attack, a serve is connected with pressure on the opponent, a defensive action is connected with maintaining the rally, and court movement is connected with team balance. As a result, technical preparedness becomes more stable, conscious and applicable in real play.

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

The use of game-based exercises also contributes significantly to the development of tactical preparedness. Students learn to analyze the game situation, choose the most appropriate action, communicate with partners and coordinate individual decisions with the needs of the team. Small-sided games, limited-touch tasks, situational exercises and modified competitive activities increase the number of active actions performed by each student and create repeated opportunities for decision-making. This is especially important in pedagogical higher education, where students must develop not only personal sports skills, but also the ability to understand, explain and teach tactical behavior.

Another important result is the growth of students' motivation and involvement in volleyball classes. Game-based exercises make the educational process more dynamic, emotionally rich and practically meaningful. They reduce monotony, support cooperation and allow the teacher to adapt tasks to different levels of physical and technical preparedness. Such flexibility is particularly valuable in student groups where learners may have unequal sports experience. Through gradual complication of exercises, every student can participate actively, experience progress and develop confidence in practical performance.

The pedagogical value of the proposed approach is also reflected in the professional preparation of future teachers. Students learn to see volleyball exercises not only as means of physical training, but also as methodological tools for developing coordination, communication, discipline, responsibility and collective thinking. Reflective analysis after game tasks helps them understand typical mistakes, evaluate tactical decisions and adapt exercises for different educational conditions. Therefore, game-based exercises contribute to the development of methodological competence that will be necessary in future pedagogical practice.

Thus, the systematic use of game-based exercises in volleyball classes can be considered an effective pedagogical technology for forming students' technical, tactical and professional preparedness. For pedagogical universities, this approach is especially relevant because it combines physical development, sports training and teacher preparation within one integrated educational process.

References

1. Fédération Internationale de Volleyball. (2025). Official volleyball rules 2025–2028. FIVB. (fivb.com)
2. Shondell, D. S., & Reynaud, C. (Eds.). (2002). The volleyball coaching bible. Human Kinetics.
3. Reynaud, C. (2011). Coaching volleyball technical and tactical skills. Human Kinetics.
4. Viera, B. L., & Ferguson, B. J. (1996). Volleyball: Steps to success. Human Kinetics.
5. Scates, A. E., Linn, M., & Kowalick, V. (2003). Complete conditioning for volleyball. Human Kinetics.
6. Bunker, D., & Thorpe, R. (1982). A model for the teaching of games in secondary schools. Bulletin of Physical Education, 18, 5–8. (bugeyed.ca)
7. Griffin, L. L., Mitchell, S. A., & Oslin, J. L. (1997). Teaching sport concepts and skills: A tactical games approach. Human Kinetics.
8. Mitchell, S. A., Oslin, J. L., & Griffin, L. L. (2013). Teaching sport concepts and skills: A tactical games approach for ages 7 to 18. Human Kinetics.
9. Metzler, M. W. (2017). Instructional models for physical education. Routledge.
10. Rink, J. E. (2014). Teaching physical education for learning. McGraw-Hill Education.

Proximus Journal of Sports Science and Physical Education
Volume 3, Issue 05, May 2026
https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

11. Siedentop, D., Hastie, P. A., & van der Mars, H. (2011). Complete guide to sport education. Human Kinetics.
12. Dyson, B., Griffin, L. L., & Hastie, P. A. (2004). Sport education, tactical games, and cooperative learning: Theoretical and pedagogical considerations. Quest, 56(2), 226–240. (Taylor & Francis Online)
13. Kirk, D., & MacPhail, A. (2002). Teaching games for understanding and situated learning: Rethinking the Bunker-Thorpe model. Journal of Teaching in Physical Education, 21(2), 177–192.
14. Harvey, S., & Jarrett, K. (2014). A review of the game-centred approaches to teaching and coaching literature since 2006. Physical Education and Sport Pedagogy, 19(3), 278–300.
15. Gabbett, T. J. (2008). Do skill-based conditioning games offer a specific training stimulus for junior elite volleyball players? Journal of Strength and Conditioning Research, 22(2), 509–517. DOI: 10.1519/JSC.0b013e3181634550 (PubMed)
16. Palao, J. M., Santos, J. A., & Ureña, A. (2004). Effect of team level on skill performance in volleyball. International Journal of Performance Analysis in Sport, 4(2), 50–60. DOI: 10.1080/24748668.2004.11868304 (Taylor & Francis Online)
17. Palao, J. M., Manzanares, P., & Ortega, E. (2009). Techniques used and efficacy of volleyball skills in relation to gender. International Journal of Performance Analysis in Sport, 9(2), 281–293. DOI: 10.1080/24748668.2009.11868484 (producciocientifica.uv.es)
18. Zetou, E., Moustakidis, A., Tsigilis, N., & Komninakidou, A. (2007). Does effectiveness of skill in Complex I predict win in men's Olympic volleyball games? Journal of Quantitative Analysis in Sports, 3(4), 1–9.
19. Marcelino, R., Mesquita, I., & Sampaio, J. (2011). Effects of quality of opposition and match status on technical and tactical performances in elite volleyball. Journal of Sports Sciences, 29(7), 733–741.
20. Zheleznyak, Y. D., & Portnov, Y. M. (2004). Sportivnye igry: Tekhnika, taktika, metodika obucheniya. Akademiya.