



Research Paper

Organizing Group Activities in the Volleyball Subject for Second-Year Students at Thai Nguyen University of Technology

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Abstract

Volleyball is a prevalent team sport within university physical education programs, offering opportunities to improve students' physical fitness and teamwork abilities. Despite its importance, second-year students often struggle with effective group coordination during the application of essential technical skills and tactical principles. This study aims to establish a structured approach for organizing group activities in volleyball classes tailored to second-year students at Thai Nguyen University of Technology. With volleyball positioned as an elective course within the physical education curriculum, noticeable disparities in skill levels and practical experience emerge among students. To address these challenges, the research incorporates methods such as document synthesis, observational analysis, and pedagogical evaluation of teaching experiences. The findings propose a systematic framework for group activities, including technical drills, movement-based games, and small-sided matches, to enhance students' learning outcomes and foster better coordination within teams.

Keywords: volleyball, group activities, physical education, university students, teaching method.

I. Introduction

Physical education plays a vital role in promoting students' physical growth, motor skills, and overall health. Beyond physical benefits, these programs contribute significantly to the development of social skills such as communication, collaboration, and teamwork. Among the diverse offerings in physical education, volleyball is a particularly popular team sport, helping students develop attributes like strength, endurance, and agility while fostering collective coordination and cooperation in a competitive setting. Nevertheless, challenges arise in the practical teaching of volleyball. Second-year students often encounter obstacles in achieving effective coordination with teammates despite prior exposure to physical education activities. Common issues include difficulties in synchronizing movements, handling the ball accurately, and providing mutual support in game situations. These shortcomings detract from the overall effectiveness of lessons and negatively impact the quality of the learning experience. At Thai Nguyen University of Technology, volleyball is offered as an elective subject aimed at enhancing fitness levels and collaborative motor skills. However, as an elective course, it attracts students with diverse skillsets, game experience, and varying degrees of interest. This diversity necessitates an adaptable method for structuring group activities that create an engaging learning environment and improve teaching success. Given these circumstances, establishing a systematic approach to organizing group activities within volleyball coursework is crucial for advancing instructional quality and equipping students with the coordination skills necessary for competitive gameplay.

II. Research Methods

2.1. Method of synthesizing and analyzing documents

This study leveraged document synthesis and analysis to gather insights into effective methods for teaching volleyball and managing group activities in physical education settings. The resources reviewed included volleyball-focused textbooks, specialized sports manuals, and academic research on pedagogical strategies in sport education. Through this comprehensive analysis, foundational principles for structuring group-based volleyball activities were identified to maximize learning outcomes.

2.2. Pedagogical Observation

Observation techniques were employed during volleyball sessions to assess the coordination competencies of second-year students both in practice drills and competitive settings. These observations enabled educators to identify specific barriers that limited effective teamwork and engagement in group exercises.

2.3. Teaching Experience Analysis

The study also incorporated the expertise of seasoned lecturers specializing in volleyball instruction at Thai Nguyen University of Technology. By analyzing their teaching practices and professional insights, actionable solutions were developed to address skill disparities among students while ensuring group activities align with their learning requirements.

III. Theoretical Basis of Organizing Group Activities in Volleyball

3.1. Concept of group activities in sports

Group activities in sports are understood as the process of coordination among individuals in a collective to perform common motor tasks. In team sports such as volleyball, coordination among members plays a decisive role in competition effectiveness.

3.2. The role of group activities in volleyball

In volleyball, each team member has specific tasks and positions. Smooth coordination among members helps the team execute tactics more effectively.

Group activities not only improve competition effectiveness but also contribute to developing students' social skills such as communication, cooperation, and mutual support.

3.3. Principles of organizing group activities

In the process of teaching volleyball, the organization of group activities must adhere to several basic principles:

- Suitable for students' technical level
- Creating opportunities for all students to participate
- Combining technique practice with competition
- Encouraging cooperation among members

IV. Development of the Method for Organizing Group Activities

4.1. Principles of developing group activities

In the elective volleyball course designed for second-year students, the structure of group activities should allow for flexibility to accommodate variations in students' technical skills and prior movement experience. To begin with, lecturers are encouraged to conduct initial assessments of students' motor abilities and technical skills during the first few sessions. This evaluation is essential for grouping students with similar skill levels, which helps create an optimal learning environment and enhances the training process. Equally important is the thoughtful allocation of group sizes to ensure active participation from all students. For fundamental technique drills, small groups consisting of 3 to 4 members are generally ideal. These smaller groups boost the frequency of ball interaction while fostering opportunities for peer support. Moreover, group activities should aim to inspire motivation among students. A combination of technical drills, movement-based games, and short matches can be employed to energize the learning environment. This dynamic approach not only increases student engagement but also contributes significantly to the effectiveness of training. Lastly, promoting communication and teamwork within groups is a critical element. Lecturers should guide students on how to exchange information effectively, assist teammates, and make quick decisions during competitive scenarios. These practices help improve not only their gameplay but also their cooperative and strategic thinking skills.

4.2. Structure of a volleyball lesson

Table 1. Structure of a volleyball lesson

Part	Content	Time	Purpose
Warm-up	Light running, joint rotation, warm-up with ball	10–15 min	Prepare the body
Technique learning	Passing, setting, serving	25–30 min	Form techniques
Group activities	Coordination exercises and small-sided matches	10–15 min	Develop coordination
Cool-down	Light walking, stretching	5 min	Recovery

4.3. Content of group activity organization Group activities in the volleyball subject are organized in stages to help students develop coordination skills.

Table 2. Content of group activities

Week	Content	Organization Form
1–2	Technique familiarization	Small group practice
3–4	Passing coordination	Groups of 3–4 students
5–6	Attacking coordination	Groups of 4–6 students
7–8	Tactical practice	Small-sided matches
9–10	Competition	6-player team format

Table 3. Some group activity exercises

No.	Exercise	Content	Objective
1	Circle passing	Continuous ball passing	Improve coordination
2	Group setting	Setting the ball back and forth	Improve technique
3	Mini matches	3v3 or 4v4	Develop tactics
4	Official matches	6v6	Apply techniques

V. Results and discussion

The pedagogical implementation of the elective volleyball course for second-year students at Thai Nguyen University of Technology underscores the pivotal role of group-based activities in improving students' learning outcomes. In contrast to mandatory physical education courses, elective sports subjects often attract a diverse cohort of students with varied levels of interest, enthusiasm, and athletic skill. This diversity presents challenges, particularly in achieving uniform technical competence and fostering teamwork during instruction. Empirical observations indicate that while a significant proportion of students demonstrate adequate mastery of fundamental volleyball techniques such as passing, setting, and serving, they encounter notable obstacles in team coordination during competitive play. These challenges are frequently attributed to limited exposure to effective communication and collaborative strategies on the court. Furthermore, students often prioritize the execution of individual techniques over the holistic dynamics of teamwork, which undermines their collective performance. To address these pedagogical challenges, integrating small group activities into the instructional framework has yielded demonstrable improvements. By organizing students into smaller groups of three to four players, opportunities for individual engagement with the ball increase significantly, thereby promoting more active participation within practice sessions. Additionally, such a structure facilitates peer-to-peer interaction and mutual support, rendering technical exercises both interactive and collaborative while reinforcing a sense of team cohesion. Practical instructional experiences suggest that repetitive yet simple coordination drills—such as circle passing or group-based setting exercises—effectively enhance students' synchronization. These drills not only refine technical execution at an individual level but also cultivate an awareness of teammates' positioning and enable real-time adjustments, fostering adaptive decision-making on the court. Moreover, introducing small-sided game formats, such as 3v3 or 4v4 matches, has contributed to creating a dynamic and engaging learning environment. These compact gameplay scenarios simulate realistic competitive conditions where swift coordination and effective collaboration are indispensable. Through such activities, students gain deeper insight into positional responsibilities and tactical strategies, augmenting their overall understanding of volleyball gameplay. A particularly significant outcome of these small group activities is their positive impact on students' self-confidence and collaborative spirit. Initially, some students exhibit apprehension about participating in matches due to fears of underperformance or negatively affecting their team's efforts. Over time, however, sustained involvement in small-group drills and matches helps mitigate such insecurities, fostering a gradual yet noticeable increase in confidence. This transformation encourages students to engage more proactively during competitive scenarios and strengthens their willingness to assist and support teammates. The role of the instructor is crucial within this approach. Teachers must actively oversee practice sessions, providing timely, constructive feedback that enables students to refine their technical skills while improving interpersonal coordination. Moreover, encouraging peer assessments enhances the efficacy of group activities by fostering a supportive and collaborative learning atmosphere, further deepening the educational experience. In conclusion, these findings highlight that carefully designed group-based instructional strategies offer multifaceted benefits in volleyball education. Such methods not only improve technical proficiency but also cultivate essential soft skills, including effective communication, teamwork, and personal responsibility. These competencies hold intrinsic value beyond sports education, contributing to academic success and professional preparedness.

VI. Conclusion

This study proposes the adoption of a structured group activity model in the elective volleyball course for second-year students at Thai Nguyen University of Technology. The proposed methodology aligns with established best practices in sports education and accounts for the diverse skill levels and learning needs of the students.

By integrating these group-oriented teaching strategies, educators can elevate the quality of instruction while fostering students' collaborative skills and sense of shared accountability. It is recommended that such frameworks be systematically incorporated into the volleyball curriculum to ensure consistency and maximize effectiveness. Furthermore, ongoing research should be undertaken to refine these methodologies and evaluate their long-term impact. These efforts are anticipated to significantly enhance the overall quality of physical education within the university's broader academic program.

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