

# A Practical Study on Tiered Training Models in College Volleyball Elective Courses

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**Abstract:** *In many university campuses, the difficulty with teaching volleyball elective courses has always been the significant variance in the sport background of the students. Traditional methods of teaching such courses to all students are increasingly impractical because of the need for personalized skill development. This research aims to support the hypothesis that a hierarchical training model is the most effective way to deliver a volleyball elective course, and ultimately to create a unique teaching pathway for students based on their specific talents and preferences. Through the findings of practice, the hierarchical training model has been able to successfully segment students' training levels based upon their initial skill assessments, thereby ensuring that students at various skill levels receive an appropriate level of skill development and participation from within the classroom by providing the opportunity to adjust the method of teaching on the basis of dynamic needs of each student.*

**Keywords:** *Tiered Training Model; College Volleyball Elective Courses; Teaching Practice; Effectiveness Evaluation*

## 1. Introduction

Reform in the teaching of physical education at all universities continues to evolve, with volleyball elective classes forming an important component of volleyball's introduction to the world. There is a large discrepancy between students' sports backgrounds and their degree of physical fitness, and any prescribed curriculum will be a deterrent to some students in terms of their progression. Layered training allows for an individualised approach to teaching according to each student's ability while creating progressively more advanced objectives and offering a systematic approach to address the problems of homogenised teaching.

## 2. Theoretical Foundations of Tiered Training Models in College Volleyball Instruction

### 2.1 Defining Core Concepts of Tiered Training Models

When layering training according to an individual's needs, we are drawing on the oldest methods of education - teaching to the individual's needs. In volleyball teaching, the layered training system represents a way for an instructor to create practical frameworks for training groups of players, based on their respective objective skill assessments. An instructor must assess an individual player's skill level at the start of class by observing them and conducting basic skills tests for essential skills such as dribbling and serving. The result of this assessment will be the basis for creating training levels - primary, intermediate or advanced - for each student according to their current level of performance, and each level will have specific training objectives and content. For example, a primary training level or beginner group may focus on establishing a solid arm swing while an advanced training level may utilize tactical tandem drills with players in motion. A distinctive characteristic of this model is that its hierarchy is not fixed; instructors adapt their hierarchy daily through ongoing assessments of the progress of each student's skills. Each day, instructors update training tasks to be more closely aligned with the developing skill level of individual players [1].

### 2.2 Theoretical Basis and Principles of Tiered Instruction

The theoretical basis of hierarchical teaching is rooted in the research findings of educational psychology on individual differences and learning motivation. There are significant differences in the speed and manner in which students acquire motor skills, and a uniform pace can easily lead to some

learners being frustrated or slack off due to difficult or easy tasks. Vygotsky's zone of proximal development theory provides key support for this, advocating that teaching should act in the region between students' current and potential levels. This theory directly leads to the principles of differentiated goals and progressive goals followed by layered training. The former requires setting specific skill goals that require effort to achieve for different levels, such as improving the stability of the ball cushion or mastering jump serve techniques; The latter emphasizes that the training content should form a continuous ladder from basic actions to combined applications.

### ***2.3 Analysis of the Suitability of Tiered Models for College Volleyball Elective Courses***

The student composition of college volleyball elective courses usually includes beginners with zero foundation and enthusiasts with certain experience, and this significant skill gap constitutes the objective starting point of teaching activities. The relatively limited class hours of the course make it difficult to support comprehensive unified teaching, and the traditional model often falls into a dilemma of neglecting the needs of students at both ends. The hierarchical mode precisely responds to this structural contradiction, by dividing and configuring exercise content of different complexities based on abilities, allowing beginners to focus on basic action shaping while those with better foundations can be exposed to tactical coordination earlier. The dynamic adjustment feature of this mode also fits the non-equilibrium progress rhythm that students may experience as the course progresses, providing a practical and feasible organizational framework for achieving personalized skill development within fixed class hours.

## **3. Practical Challenges in Implementing Tiered Training Models for College Volleyball Electives**

### ***3.1 Conflict Between Student Skill Variability and Instructional Uniformity***

The fundamental differences among students in college volleyball elective courses are directly manifested in a wide spectrum of abilities from scratch to possessing stable passing skills, which forces teaching organizations to face fundamental challenges. The teaching syllabus usually sets a unified path for technological advancement, but individual technical aspects in classroom practice are difficult to simultaneously meet the real needs of students at different levels. Zero starting students need to repeat a lot of basic movements to form muscle memory, while students with better foundations are prone to losing focus and interest in repetitive exercises. The depth and speed of a teacher's explanation and demonstration often have to compromise, and being too fast may leave beginners at a loss, while going too far may make experienced people feel sluggish. The unified arrangement of exercise projects further highlights this contradiction, as it cannot provide matching training loads and complex situations for students with different levels of progress, resulting in some students being unable to improve due to easy tasks, while others are repeatedly frustrated due to difficult tasks, making it difficult to achieve the expected classroom effectiveness [2].

### ***3.2 Lack of Tiering Criteria and Dynamic Adjustment Mechanisms***

The primary prerequisite for effectively implementing hierarchical teaching is to establish a clear and operable set of ability assessment standards. However, currently, volleyball elective courses generally lack such specialized assessment tools. Teachers often rely on empirical observation or simple technical demonstrations to make rough distinctions, and this subjective judgment is easily influenced by immediate classroom performance, which may overlook the true comprehensiveness of students' skill structures. There are doubts about the scientificity and impartiality of a grouping scheme formed solely based on first class impressions. The more critical dilemma lies in the widespread lack of subsequent dynamic adjustment mechanisms, the inconsistent progress speed of individual students in the teaching process, and the lack of fixed channels for regular re evaluation and hierarchical flow. The initial hierarchical division may gradually lose its rationality as the course progresses, and students who make rapid progress may face a decline in training challenges within the original hierarchy, while students who make slow progress may continue to bear excessive pressure. Static grouping essentially weakens the core advantage of differentiated instruction in hierarchical training, transforming it into a fixed label that cannot have a sustained promoting effect on students' learning and development.

### ***3.3 Challenges in Teaching Resources and Faculty Allocation***

The smooth implementation of the layered training mode relies on the corresponding teaching resource guarantee, but the practical conditions of volleyball elective courses in universities often fail to meet its needs. Sports venues are usually tight during scheduling periods, and the number of halves and nets that a class can use is limited. Different levels of groups need to engage in differentiated practice content simultaneously, and insufficient venue facilities can limit the synchronous development of multiple group activities. Equipment allocation often follows uniform standards, making it difficult to provide training equipment that is suitable for different levels, such as auxiliary exercise equipment required for basic groups or high-quality balls required for advanced levels. The allocation of teaching staff constitutes a deeper constraint, as a teacher needs to pay attention to the training situation of multiple groups at the same time. The dispersion of their energy leads to the inability to provide timely and sufficient guidance on the details of each level's exercises, which may greatly reduce the effectiveness of hierarchical training design in practical implementation.

### ***3.4 Potential Issues in Student Psychology and Classroom Management***

Layered training may trigger subtle psychological changes in student groups and new issues in classroom management. Some students who are classified into the basic level are prone to developing label based cognition of insufficient self ability, which may weaken their learning confidence and willingness to actively try. At the same time, students entering higher-level groups may also face implicit pressure to maintain their current hierarchy or develop unhealthy comparative attitudes between groups. Teachers need to invest extra effort in paying attention to the emotional states and interactive relationships of students at different levels, and classroom management should shift from maintaining a unified order to coordinating differentiated activities among multiple groups. If students' psychological fluctuations are not given timely attention and guidance, they may directly affect their focus and persistence in technical practice, thereby interfering with the personalized learning process preset by hierarchical training, and making teaching organizations face more complex dynamic challenges than traditional models [3].

### ***3.5 Mismatch Between Traditional Evaluation Systems and Stratified Instructional Goals***

The traditional evaluation system usually relies on standardized technical proficiency exams or final skill tests, which are difficult to accurately measure the personalized development of students under the hierarchical teaching framework. Layered training sets different stage goals for students with different starting points, for example, beginners focus on mastering correct movements, while those with a foundation need to improve the stability of technical application and tactical awareness. However, if the final assessment still uses the unified number of successful serve attempts or the number of balls in place as the main indicators, it will not effectively reflect the true progress of students within their respective levels. This contradiction may mislead students' learning direction, causing them to neglect systematic training for their own weaknesses in order to cope with exams. At the same time, it also makes it difficult for teachers to objectively evaluate the implementation effect of hierarchical teaching through final grades, resulting in a disconnect between the evaluation process and the teaching process.

## **4. Strategies for Constructing and Implementing the Stratified Training Model in College Volleyball Electives**

### ***4.1 Establishing Scientific Stratification Criteria and Dynamic Adjustment Mechanisms***

The construction of scientific stratification relies on a carefully designed initial diagnostic process, which needs to be systematically implemented at the beginning of teaching. The diagnostic content should include a basic assessment of the standardization of techniques such as wall dunking, positioning passing, and starting serve. At the same time, a simple combination task of receiving and throwing the ball and moving the cushion towards the designated area should be set up to observe students' basic motor perception and physical coordination ability. The evaluation tool uses a segmented behavior checklist to break down each technique into multiple observable and traceable dimensions, such as "reasonable preparation posture," "accuracy of hitting position," and "coordination of power sequence. Teachers classify students into a consolidation layer focused on action norms, an integration layer aimed at technical application, or an expansion layer oriented towards tactical

awareness based on objective records from the checklist rather than subjective impressions.

The implementation of the dynamic adjustment mechanism is reflected in the pre-set periodic review nodes and clear upgrade and downgrade channels in the teaching process. After completing a core teaching unit, teachers use some of the classroom time to briefly review the skills of all students in that unit, such as observing students' ability to control the direction of cushion passing while moving after the passing unit. The review results and daily training observation notes together form a file of student progress, and teachers regularly compare the file records with the expected progression trajectory of each level. For students who have made significant progress and reached the threshold of the previous level, or students who continue to encounter difficulties at the current level, teachers will update the grouping list and adjust their training task cards synchronously before the start of the next teaching cycle after communication. This continuous fine-tuning ensures that teaching interventions always align with each student's dynamically changing 'zone of proximal development' [4].

#### ***4.2 Designing Differentiated Instructional Objectives and Content Systems***

The differentiated teaching objectives need to be refined into specific behavioral standards that students at all levels can perceive, achieve, and verify. The goal set by the teacher for beginners needs to anchor the standardized mastery of a single technical link, such as maintaining a stable arm angle and being able to control the direction of hitting the ball more than ten times in continuous practice against the wall. The effective application of hierarchical goal pointing technology in simplified confrontation requires the receiver to be able to place at least 70% of the incoming ball within a set area of three meters when serving. Higher level objectives focus on technical combination and decision-making, for example, in the two to two simulation confrontation, reasonably select the transition of passing or organize an effective attack according to the incoming ball situation. Clear hierarchical behavioral goals enable students to have a clear understanding of the core issues that should be focused on solving at the current stage, and also provide a clear anchor for teachers to observe and provide feedback.

Differentiated content design is reflected in weaving multiple parallel practice paths within the same teaching unit. Taking the cushion ball technique unit as an example, the beginner group mainly focuses on self cushion balls, wall cushion balls, and fixed position peer light throwing cushion balls, with the emphasis on forming the correct power shaping. Incorporating mobile elements into the practice of entering the class group, the content is designed to throw the ball towards a fixed target after receiving it from an unspecified point, or to perform simple continuous pad passing coordination. At higher levels, they directly engage in a series of exercises that are close to actual combat, arranging a combination of receiving and serving the ball, adjusting the pass, and simulating the spike. Teachers need to plan in advance the required venue zoning and equipment types for each level, such as setting up more wall practice points and providing auxiliary markers for novice groups, and reserving a complete half for advanced groups to practice in series. In terms of class scheduling, teachers can adopt a sub station rotation or time period focusing mode to ensure that students at each level can have sufficient deliberate practice time on exercises that match their goals in each class.

#### ***4.3 Innovating Stratified Organizational Forms and Teaching Methods***

The construction of a hierarchical organizational form requires solving the problem of space and time allocation for multiple groups to engage in parallel activities within the same classroom. Teachers can divide students into several fixed training groups based on the initial evaluation results, and assign relatively fixed practice areas and equipment to each group. The classroom process adopts a modular design, dividing the total class hours into several main paragraphs. Within each paragraph, each group executes different core practice tasks based on their own hierarchical goals. For example, in the technical practice module, the basic group strengthens the in place cushion ball movement, while the advanced group has carried out a series of cushion passes during movement. This arrangement requires teachers to have a clear understanding of the overall progress and the progress of each group, and to be able to coordinate the transitions between different modules through clear signals or instructions, thereby maintaining a multi-layered parallel teaching order within limited space and class hours.

The innovation of teaching methods is reflected in matching more targeted guidance strategies for training tasks at different levels. For the basic level, teachers need to use a combination of decomposition demonstration, language prompts, and immediate feedback to focus on helping students establish correct motor representations and muscle sensations. Advanced level teaching can be more

integrated into the task driven approach, such as setting specific challenges such as "10 consecutive dribbles in place" or "service placement zone", to guide students to adjust the use of technology in close to actual combat situations. Higher levels are suitable for introducing simple competitions or setting complex tactical scenarios, which can help students improve their proficiency and effectiveness in technical combinations through quick decision-making. The role of teachers has shifted from being a unified presenter to a designer of learning resources and a guide for various levels of activities. Their guidance needs to be differentiated according to the characteristics of group tasks [5].

#### ***4.4 Reforming Comprehensive Evaluation Systems for Process and Development***

Process evaluation requires teachers to integrate observation and recording into every aspect of daily training. Classroom performance records should focus on the quality of students' completion of specific tasks at their respective levels, such as the standardization of basic group students' dribbling movements and the number of hits, or the rationality of advanced level students' technical application in simple confrontations. Teachers can use simple checklists or study files to regularly record changes in students' performance and typical problems in key skill dimensions. The skill advancement file sets up an individualized tracking path for each student, which not only includes the nodes of technical standards, but also encompasses various elements such as practice attitude, teamwork awareness, and the level of enthusiasm in facing challenges. These continuously accumulated formative evidence can objectively depict students' learning trajectories, providing immediate basis for teaching adjustments and individual guidance.

The core of developmental evaluation is to assess the degree of progress and effort of students relative to their starting point. Evaluation design should include two dimensions: intra level progress assessment and cross level growth recognition. The intra level assessment focuses on measuring students' achievement in the target sequence of this level, and its standards are compared to the personal baseline established at the beginning of the diagnosis period. Cross level growth focuses on students who achieve hierarchical transitions through continuous efforts in reassessment, and their evaluation should fully recognize the comprehensive ability improvement represented by this breakthrough. The final assessment should integrate process records and developmental evaluation results, using a combination of skill display, learning file review, and comprehensive task completion to form a final evaluation report that reflects the personalized growth process of students.

#### ***4.5 Ensuring Teaching Resources and Transforming Faculty Roles***

The guarantee of teaching resources requires systematic optimization and creative utilization of existing conditions. The site planning should be based on the characteristics of the training content of each level group, with functional zoning, sufficient isolation space designated for the basic group to practice repetitive movements, and reserved areas for the advanced level group to perform simple serial movements. Equipment allocation should go beyond simple quantity increases and shift towards classified configurations for different levels of needs, such as preparing more soft volleyball or auxiliary positioning markers for beginners, providing standard match balls for advanced students, and configuring simple statistical tools. In the case of limited teaching resources, it is feasible to discover and train senior students or students with outstanding specialties as teaching assistants. They can assist in supervising basic group exercises or leading preparatory activities under the guidance of teachers, thereby alleviating the pressure of teachers focusing on multiple groups at the same time.

The role of teachers needs to shift from a single knowledge and skill transmitter to a designer and coordinator of a hierarchical learning ecosystem. The focus of the teaching preparation stage has shifted towards designing multi-level training task modules and corresponding evaluation plans, rather than just preparing unified teaching content. The core responsibility of teachers in classroom teaching has shifted to controlling the overall process and accurately intervening in key learning nodes. Their activity trajectory travels between multiple groups, observing the completion of tasks at each level and providing differentiated feedback. Teachers also need to closely monitor the psychological dynamics and group interactions of students at different levels, timely guide a positive learning atmosphere, and resolve potential negative labeling effects. This role transition requires teachers not only to master volleyball skills, but also to have comprehensive teaching abilities in classroom organization, process evaluation, and individual motivation.

## 5. Conclusion

A hierarchical model for teaching has been shown to be effective in reconciling differences between various educational backgrounds from which students come into college, as well as reconciling the various structures used by colleges and universities to provide instruction to their student populations. Dynamic hierarchical adjustment mechanisms can be used to provide adaptive learning experiences that support the progression of students within their individual learning pathways; the evaluation system will provide complete tracking of the developmental path of a student's skill Set. The successful implementation of this model will require the continued development of specialized training for teachers, improved allocation of institutional resources and the continued enhancement of the innovation of university physical education courses.

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