

An Experimental Study on the Application of Step-by-Step Teaching Mode in Middle School Volleyball Teaching



Yuehua Zhang¹, Li-E He¹, Xiao Dong¹, Junwen Xiong¹ & Junying Ge^{1,*}

¹Yichun University, P.R. China

Abstract: This paper uses the method of literature materials, interviews, experiments, mathematical statistics and comparative analysis, adopts the method of experimental grouping, uses the "stepped" teaching mode and the traditional teaching mode to teach volleyball to junior high school students, and compares the effects of teaching. To verify the advantages of the "stepped" teaching mode. Results: The "stepped" teaching mode can better improve junior high school students' interest in volleyball learning; the "stepped" teaching mode can significantly improve students' volleyball skills, and the improvement effect is significantly better than the traditional teaching mode; the "stepped" teaching mode is basically the same as the traditional teaching mode in improving the physical quality of junior high school students. Conclusion: The "stepped" teaching mode is an important method to improve the technical ability of volleyball in middle school students. In the future, this mode should be selectively used in teaching, which will bring greater help to the improvement of the teaching effect of middle school volleyball.

Keywords: ladder teaching mode, volleyball teaching, junior high school students, teaching effect

1. Introduction

In secondary school education, the importance of physical education is self-evident. It plays a significant role in improving students' physical fitness and promoting their overall development. Therefore, reforming and innovating physical education teaching modes has important value for improving teaching effectiveness (Gai, H. X., 2021).

Volleyball is a team competitive sport that is widely developed in China. In particular, its implementation in secondary schools plays an important role in improving students' physical fitness. However, due to the relatively complex technical and tactical system of volleyball, many schools still adopt teaching methods and content that are relatively monotonous and simple in the process of conducting volleyball teaching. This not only affects the improvement of students' volleyball skills but also restricts the overall development of volleyball teaching in secondary schools. Against this background, innovating the volleyball teaching mode in secondary schools is a topic of important practical significance (Guan, Y. W., 2021; Jin, C., 2021).

The stepped teaching mode is an innovative teaching mode that has gradually emerged in recent years. Its main feature is that it can provide corresponding instruction according to students' different levels, thereby comprehensively improving students' skill levels. At present, this teaching mode has been widely applied in many courses, but its

application in volleyball teaching is relatively rarely mentioned.

In the context of modern secondary school volleyball teaching, it is necessary to introduce new teaching modes. While improving students' physical fitness, it can also better cultivate their interest in learning volleyball, which is very necessary for the comprehensive development of students' overall quality (Li, F., 2022; Li, W. X., 2021; Liang, J. W., 2021).

This study selected 40 first-year junior high school students from Yichun No.1 Middle School and divided them into an experimental group and a control group. The experimental group received volleyball instruction using the stepped teaching mode, while the control group received traditional volleyball teaching.

By comparing the two groups in terms of volleyball technical skills, physical fitness, and interest in learning volleyball, the study aims to verify the advancement of the stepped teaching mode. Through this study, in theoretical terms, it can provide supplementary evidence for research on stepped teaching in secondary school volleyball instruction and offer theoretical reference for future studies. In practical terms, it can further clarify the value of stepped teaching in secondary school volleyball education and promote its application, thereby contributing to the improvement of students' volleyball skills.

Corresponding Author: Junying Ge
Yichun University, P.R. China

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2. Research Objects and Methods

2.1 Research subjects

Forty first-year junior high school students from Yichun No.1 Middle School were randomly selected as the research subjects.

2.2 Research methods

2.2.1 Literature review method

According to the research content, relevant books and monographs on volleyball teaching and stepped teaching were first consulted in the library of Yichun University. Then, using keywords such as “volleyball teaching,” “secondary school volleyball,” and “stepped teaching,” relevant master’s theses and journal articles were retrieved from CNKI.

The main research findings and viewpoints were summarized, with a focus on analyzing the application of the stepped teaching mode, which served as the main theoretical basis for subsequent writing and analysis.

2.2.2 Interview method

Through online communication, interviews were conducted with physical education teachers specializing in junior high school volleyball teaching, well-known volleyball coaches, and PE teachers involved in volleyball teaching at Yichun No.1 Middle School. The purpose was to understand issues and details related to the application of stepped teaching in secondary school volleyball instruction.

In addition, the experimental procedure of this study was reviewed through consultation, and relevant suggestions were provided. Based on these suggestions, the experimental design was revised and improved.

2.2.3 Questionnaire survey method

Before and after the experiment, questionnaires were distributed to 40 junior high school students from Yichun No.1 Middle School to investigate their interest in learning volleyball.

2.2.4 Experimental method

Forty male students were randomly selected from the first year of junior high school at Yichun No.1 Middle School and divided into an experimental group and a control group. There were no significant differences between the two groups in age, physical condition, or volleyball foundation.

During the entire experiment, the experimental group adopted the stepped teaching mode. According to differences in students’ volleyball skill levels, they were divided into three levels. Based on the differences in basic volleyball ability among these levels, teaching objectives, tasks, and instructional methods were also differentiated.

During instruction, the PE teacher first explained and demonstrated volleyball techniques to both the experimental and control groups, ensuring all students were familiar with basic volleyball skills. Then, different teaching modes were applied.

For the experimental group, targeted explanation and guidance were provided according to the differences in students’ basic volleyball abilities across the three levels. In the final stage of teaching, students conducted independent practice, with teachers providing targeted guidance. Each level of students followed a progressive learning process until the end of the experiment.

For the control group, traditional teaching methods were adopted. Apart from unified explanation and demonstration, no additional targeted instruction was provided.

Throughout the experiment, the only difference between the two groups was the teaching method. All other conditions were kept consistent to avoid interference from external factors.

Before and after the experiment, students in both groups were tested and compared in terms of volleyball learning interest, volleyball technical skills, and physical fitness. The scoring criteria for learning interest are shown in Appendix 1, and the technical evaluation standards are shown in Appendix 2.

The experimental protocol was reported to and approved by the academic affairs office and the physical education teaching and research department of Yichun No.1 Middle School. Since the participants were first-year junior high school students (minors), informed consent forms were distributed to their legal guardians before the experiment. The consent forms clearly explained the purpose, content, duration, potential risks, and benefits of the study, and emphasized voluntary participation. Participants and guardians were informed that they could withdraw at any time without any impact on regular PE course grades. All participants were included only after signed informed consent was obtained.

2.2.5 Mathematical statistics method

Relevant data were entered into Excel 2019 and analyzed using SPSS 26.0 for statistical computation and analysis, serving as an important basis for subsequent interpretation.

2.2.6 Comparative analysis method

Data from both groups before and after the experiment were analyzed. Based on relevant literature, longitudinal and inter-group comparisons were conducted. The characteristics reflected in the data were summarized, conclusions were drawn, and suggestions were proposed (Liu, X., 2022).

3. Results and Analysis

3.1 Overview of the stepped teaching mode

The stepped teaching mode was first proposed and further developed by the American scholar Gagné. He suggested that, based on students’ mastery of skills, teaching should be divided into six stages in order to enhance students’ enthusiasm and

their ability for autonomous learning during the teaching process (Xu, H., 2022; Zhang et al., 2021).

These stages include:

First, concept acquisition, in which students are required to preview relevant concepts and knowledge before class, engage in self-directed learning, and identify their own deficiencies;

Second, the Gagné model stage, in which teachers guide students to review previously learned knowledge, enabling a deeper understanding;

Third, case-based teaching, where teachers use case studies to further strengthen students' comprehension and raise questions during explanation;

Fourth, inquiry-based learning, in which students explore and understand questions or difficulties through independent inquiry;

Fifth, project-based teaching, where teachers provide more detailed explanations of relevant

knowledge to deepen understanding;

Sixth, autonomous learning, in which teachers continue to reinforce instruction while encouraging students to further develop independent learning abilities (Duan, X. N., 2022).

3.2 Comparative analysis of students' interest in volleyball learning before and after the experiment

For junior high school students, participation in sports activities is largely based on interest. Therefore, in volleyball teaching, it is necessary to enhance students' interest in volleyball so as to continuously improve their enthusiasm for participation.

A statistical comparison of the two groups' interest in volleyball learning before and after the experiment was conducted, and the results are shown as follows.

Table 1. Interest in Volleyball Learning of Two Groups Before and After the Experiment (N = 40)

Group	Experimental (N=20)	Control (N=20)	p
Before the Experiment (score)	68.5±10.17	68.0±11.59	0.297
After the Experiment (score)	88.2±8.43	72.5±10.78	0.003

Note: $P < 0.05$ indicates a significant difference; $P > 0.05$ indicates no significant difference.

As shown in Table 1, both groups exhibited certain changes in their interest scores before and after the experiment. An independent samples t-test was conducted on the two sets of data. Before the experiment, $P > 0.05$, indicating no significant difference between the two groups; after the experiment, $P < 0.05$, indicating a significant difference.

Moreover, the data show that the experimental group performed significantly better than the control group. This indicates that the increase in volleyball learning interest in the experimental group after the experiment was greater than that in the control group (Tang, L., 2021; Wei, Y. Y., 2021).

In summary, through the application of different teaching modes, the experimental group showed a more pronounced improvement in interest in learning volleyball, while the control group showed only a slight increase. This suggests that the stepped teaching mode significantly improves students' interest in learning volleyball, whereas the traditional teaching mode has limited impact.

The reasons for this phenomenon may be analyzed as follows: in the stepped teaching mode,

instruction is tailored according to students' differences in volleyball foundation, allowing students at different levels to receive appropriate teaching. This approach fully mobilizes students' initiative, enabling them to address their own deficiencies and significantly enhancing their enthusiasm for participation. Over time, this leads to an increased interest in learning volleyball.

In contrast, under the traditional teaching mode applied to the control group, both teaching content and methods are relatively uniform. This can easily result in boredom during the learning process and, in extreme cases, may even cause some students to develop resistance toward volleyball learning, thereby negatively affecting their interest.

3.3 Comparative analysis of basic volleyball technical skills

In volleyball teaching, instruction for junior high school students should focus on aspects such as the standardization of technical movements, hitting strength, contact point, and landing point. The stepped teaching mode often has a distinctive effect on improving volleyball technical skills.

In this study, the basic volleyball technical skills of both the experimental group and the control group were statistically analyzed and compared before and after the experiment. The results are as follows.

3.3.1 Comparison of volleyball technical skills in the experimental group before and after the experiment

Table 2. Comparison of Volleyball Technical Skills in the Experimental Group Before and After the Experiment

Experimental Group Volleyball Skills	Pre-test(N=20)	Post-test(N=20))	p
Volleyball skill performance score (points)	31.5±7.15	39.3±5.83	0.007
Stationary forearm pass test (times)	2.75±1.31	8.2±3.09	0.002
Volleyball serving test (points)	1.9±1.08	6.35±2.14	0.001

Note: $P < 0.05$ indicates a significant difference; $P > 0.05$ indicates no significant difference.

As shown in Table 2, after comparing the volleyball technical skills of the experimental group before and after the experiment, improvements were observed in technical movement scores, the forearm passing test, and the serving test.

An independent samples t-test was conducted on these three indicators, yielding P-values of 0.007, 0.002, and 0.001, respectively, all of which are less

than 0.05. This indicates that there are significant differences among the data sets.

In other words, the volleyball technical skills of the experimental group improved significantly. This demonstrates that the stepped teaching mode can significantly enhance students' volleyball technical abilities.

3.3.2 Comparison of volleyball technical skills in the control group before and after the experiment

Table 3. Comparison of Volleyball Technical Skills in the Control Group Before and After the Experiment

Control Group Volleyball Skills	Pre-test (N=20)	Post-test (N=20)	p-value
Volleyball skill performance score (points)	32.0±10.51	33.7±7.29	0.079
Stationary forearm pass test (times)	2.8±2.42	4.15±3.58	0.006
Volleyball serving test (points)	1.95±2.24	3.10±2.05	0.003

Note: $P < 0.05$ indicates a significant difference; $P > 0.05$ indicates no significant difference.

As shown in Table 3, after testing the volleyball technical skills of the control group before and after the experiment, improvements were also observed in technical movement scores, the forearm passing test, and the serving test.

The P-values obtained from the independent samples t-test were 0.079, 0.006, and 0.003, respectively. Among them, the P-value for technical movement scores is greater than 0.05, indicating no

significant difference. However, the P-values for the forearm passing test and the serving test are less than 0.05, indicating significant differences.

These results indicate that the traditional teaching mode can also improve students' volleyball technical skills to a certain extent. However, its effect on improving the standardization of technical movements is not significant, while its effect on improving forearm passing and serving skills is relatively better.

3.3.3 Comparative analysis of the magnitude of improvement in volleyball technical skills between the two groups after the experiment

Table 4. Comparison of Improvement Magnitude in Volleyball Technical Skills Between the Two Groups After the Experiment

Improvement in Volleyball Skills	Experimental Group (N=20)	Control Group (N=20)
Volleyball skill performance score (points)	93.6%	28.3%
Stationary forearm pass test (times)	198.2%	48.2%
Volleyball serving test (points)	234.2%	59.0%

As presented in Table 4, a post-experiment comparison was conducted to examine differences in the improvement of volleyball technical skills between the experimental and control groups.

In the experimental group, the improvement rates for technical movement scores, forearm passing, and serving reached 93.6%, 198.2%, and 234.2%, respectively. By contrast, the control group recorded

much lower gains of 28.3%, 48.2%, and 59% on the same indicators.

Overall, the findings show a considerable gap between the two instructional conditions. Students exposed to the phased teaching model made significantly more progress in all examined technical parameters. This shows that the methodology is very successful at enhancing fundamental volleyball abilities and produces more significant learning results than standard instructional methods.

This distinction might be perceived via the lens of instructional organization and student engagement. Teachers in the experimental group were able to customize instruction to different ability levels, providing additional support to lower-performing students while allowing higher-performing students to engage in more cooperative and advanced practice assignments. Such individualized instruction resulted in a more adaptable learning environment.

In addition, peer interaction was vital in the learning process. Students were not limited to teacher-led instruction; instead, they helped each other during practice. Less skilled learners benefited from peer correction of motions, but more advanced students consolidated and polished their skills

through explanation and collaborative practice. This reciprocal learning approach aided overall skill growth in the group (Wu, L. Q., 2021).

In contrast, the control group's standard teaching methodology allowed for limited individualized training. Due to time and organizational restrictions, teachers were unable to address differences in student aptitude. As a result, weaker students frequently received insufficient focused feedback, limiting their progress and, in some circumstances, decreasing their learning motivation. This imbalance explains the lesser improvements seen in the control group (Duan, X. N., 2022; Chen, J. W., 2022).

3.4 Comparative analysis of physical fitness before and after the experiment

Physical fitness is a necessary prerequisite for participating in sports activities and plays an important role in skill acquisition and performance. Both groups were assessed before and after the experiment to guarantee the dependability of the results.

The evaluation criteria were the 1-minute quadrant leap, sit-and-reach test, standing long jump, and 50-meter sprint. The detailed findings of these tests are provided in the following section.

3.4.1 Experimental group

Table 5. Comparison of Physical Fitness of Students in the Experimental Group Before and After the Experiment

Pre-test (N=20)	Post-test (N=20)	p-value
8.75 ± 3.29	8.83 ± 4.12	0.113
6.48 ± 4.10	8.71 ± 5.24	0.205
167.4 ± 18.76	173.6 ± 16.37	0.196
9.76 ± 1.21	9.72 ± 1.19	0.081

Note: $p < 0.05$ indicates a significant difference; $p > 0.05$ indicates no significant difference.

According to Table 5, slight improvements can be observed across all four physical fitness indicators after the experiment. Although the values show an upward trend, the changes remain relatively limited in magnitude.

When the data were further examined using

t-tests, all P-values exceeded 0.05. This means that the observed improvements cannot be considered statistically significant. In practical terms, while the stepped teaching mode appears to bring some positive changes, its direct impact on physical fitness development within this short period is not particularly evident.

3.4.2 Control group

Table 6. Comparison of Physical Fitness of Students in the Control Group Before and After the Experiment

Physical Fitness (Control Group)	Pre-test (N=20)	Post-test (N=20)	p-value
1-min quadrant jump test (times)	8.77 ± 3.54	8.85 ± 4.20	0.087
Sit-and-reach (cm)	6.62 ± 3.61	8.64 ± 4.91	0.154
Standing long jump (cm)	168.1 ± 19.82	174.2 ± 15.83	0.092
50 m sprint (s)	9.73 ± 1.35	9.69 ± 1.24	0.115

Note: $p < 0.05$ indicates a significant difference; $p > 0.05$ indicates no significant difference.

A similar pattern appears in the control group. As shown in Table 6, all four indicators demonstrate minor increases after the teaching intervention.

However, statistical testing again shows that all P-values are greater than 0.05. In other words, the

3.4.3 Comparison between the two groups

Table 7. Comparison of Improvement Rates in Physical Fitness Between the Two Groups After the Experiment

Physical Fitness Improvement	Experimental Group (N=20)	Control Group (N=20)
1-min quadrant jump test	0.9%	0.9%
Sit-and-reach (cm)	34.4%	30.5%
Standing long jump (cm)	3.7%	3.6%
50 m sprint	0.4%	0.4%

From Table 7, the improvement rates for the experimental group were 0.9%, 34.4%, 3.7%, and 0.4%, while the control group recorded 0.9%, 30.5%, 3.6%, and 0.4%, respectively.

Looking at these figures side by side, the differences between the two groups are minimal. Neither group shows a clear advantage in terms of physical fitness enhancement.

When Tables 3-6 and 3-7 are considered together, a consistent conclusion emerges: the two teaching modes yield very similar outcomes in this aspect. One plausible explanation is that the instructional focus of this experiment was placed more heavily on technical skill development rather than systematic physical conditioning. In addition, the relatively short duration of eight weeks may not be sufficient for measurable changes in physical fitness to become apparent.

4. Conclusions and Recommendations

4.1 Conclusions

4.1.1 By grouping students according to their skill levels, tiered teaching ensures that the learning objectives for each level are set within the students' 'zone of proximal development'. This approach not only avoids the problems associated with the 'one-size-fits-all' approach in traditional teaching—where some students are 'under-challenged' whilst others are 'over-challenged'—but also, through the design of progressively more demanding tasks, continuously stimulates students' motivation to take on challenges and their sense of self-efficacy, which, from a cognitive psychology perspective, explains why the experimental group demonstrated significantly greater learning interest and technical improvement than the control group.

4.1.2 Step-by-step instruction breaks down complex volleyball techniques into progressively advancing smaller tasks, reducing the cognitive load on beginners during the early stages of skill

changes do not reach a significant level. This suggests that the traditional teaching approach also fails to produce a noticeable improvement in students' physical fitness within the duration of this study.

acquisition. This enables students to experience relative success at each stage, thereby promoting the automatic development of motor skills. This explains why the experimental group's improvement in technical indicators such as setting and serving (198.2 per cent and 234.2 per cent, respectively) far exceeded that of the control group.

4.1.3 Under the conditions of this experiment, the step-by-step teaching model was effective in enhancing Year 7 boys' interest in learning volleyball and their basic technical proficiency.

4.1.4 This model can serve as an effective supplementary approach to volleyball teaching under similar conditions (ordinary urban secondary schools, Year 7, male students); however, caution and further validation are required when extending its application to other year groups, female students or schools in different regions.

4.2 Recommendations

4.2.1 In secondary school volleyball teaching, the step-by-step teaching model plays a positive role in enhancing secondary school pupils' interest in learning volleyball. Therefore, step-by-step teaching content that aligns with the physical and psychological characteristics of secondary school pupils should be selected, taking into account their level of interest and enthusiasm for the sport, in order to further enhance the effectiveness of this teaching approach.

4.2.2 At present, the overall application of step-by-step teaching in secondary school volleyball instruction remains relatively limited. It is necessary to selectively incorporate step-by-step teaching content, taking into account the actual circumstances of different secondary schools in terms of teaching staff, facilities and funding, thereby further improving the effectiveness of volleyball instruction.

4.2.3 Step-by-step teaching serves primarily as a supplement to traditional teaching methods. Secondary school volleyball teachers should further enhance their own teaching capabilities; on this basis,

they should study and draw upon relevant aspects of step-by-step teaching, whilst also innovating existing teaching models to fully realise the role and value of step-by-step teaching in volleyball instruction.

4.3 Limitations of the study

4.3.1 Limited representativeness of the sample:

This study selected only 40 male students from the first year of secondary school at Yichun No. 1 Secondary School; it did not include female students or other year groups. Given the small sample size and single source of participants, the external validity of the study's conclusions requires further testing once the sample size and scope have been expanded.

4.3.2 Short experimental period: This teaching experiment lasted only eight weeks. For indicators such as physical fitness, where significant changes require long-term accumulation to become apparent, this duration may not be sufficient to fully reflect the differences between the two teaching models; consideration could be given in future to extending the experimental period to conduct follow-up studies.

4.3.3 Limitations of experimental control conditions: Although efforts were made to control for extraneous variables during the experiment, due to constraints imposed by the actual teaching environment (such as students' participation in extracurricular activities and the sporting atmosphere at home), there may be confounding factors that cannot be completely ruled out.

Conflict of Interest

The authors declare that they have no conflicts of interest to this work.

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Appendix 1: Questionnaire on Middle School Students' Interest in Learning Volleyball

Hello. We are currently conducting an experimental study titled "The Application of a Step-by-Step Teaching Model in Middle School Volleyball Instruction."

This questionnaire is designed to investigate your interest in learning volleyball. We kindly ask for your cooperation and honest responses, which will be used only for research purposes.

In this questionnaire, 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree. Please tick (✓) the option that best represents your response. Thank you for your participation.

No.	Item	5	4	3	2	1
1	I am very interested in physical education classes.					
2	I am very interested in volleyball classes.					
3	I actively and energetically practice volleyball skills.					
4	I feel bored or uninterested during volleyball classes.					
5	I practice volleyball outside of class time.					
6	I am confident in my learning progress.					
7	I am unwilling to practice skills that I have not mastered well.					
8	I believe I can master volleyball skills in a short time.					
9	I feel disappointed when my performance does not improve.					
10	I am willing to practice after class to improve my performance.					
11	I would give up other sports to focus on learning volleyball skills.					
12	I think learning volleyball is not interesting and prefer other sports.					
13	I think volleyball skills such as bumping and serving are too simple and uninteresting.					
14	I only practice skills I like and avoid others.					
15	I spend more time on other sports than on volleyball.					
16	I tend to give up when I cannot achieve my set goals.					
17	I can complete learning tasks easily.					
18	I am often very busy trying to achieve my learning goals.					
19	I feel fatigued when learning volleyball skills.					
20	I set small goals for myself to motivate progress toward larger goals.					

Appendix 2: Testing Methods and Scoring Criteria for Middle School Volleyball Skills

Testing procedures for experimental indicators:

During the experiment, the instructional content for both the experimental group and the control group remained the same. The only difference was the teaching method used. To better compare differences in volleyball skill performance between the two groups, the assessment was conducted with reference to the scoring standards specified in the middle school physical education volleyball teaching syllabus, as shown in Table 1.

Table 1. Testing Methods and Requirements for Middle School Volleyball Skills

Skill	Type	Testing Method and Requirements
Forearm passing (stationary bump)	Testing method	Students perform forearm passing with both hands against a wall. A combination of passing and bumping is allowed until the ball touches the ground, which marks the end of the trial. Each student has two attempts, and the best score is recorded.
Forearm passing (stationary bump)	Requirements	Students must follow teacher instructions and complete the test in an orderly manner. Students who are not testing or have already completed testing are not allowed in the testing area.
Volleyball serving	Testing method	Students perform overhand serves from the baseline. A total of 10 serves are conducted, and the number of successful serves crossing the net is recorded. Faults such as dropped ball, net fault, and out-of-bounds are not counted. Each student has two attempts, and the best result is recorded.
Volleyball serving	Requirements	Students must follow instructions and maintain order during testing. No loud noise or interference is allowed. Students who complete the test are responsible for collecting balls.

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Volleyball serving	Requirements	Students must follow instructions and maintain order during testing. No loud noise or interference is allowed. Students who complete the test are responsible for collecting balls.

In assessing the forearm passing and serving skills of the two groups of students, two professional volleyball coaches were invited to independently evaluate students' technical performance. The final score for each student was calculated as the average of the ratings given by the two evaluators.

The performance of both forearm passing and serving was assessed based on five key indicators. Each indicator was scored on a five-point scale, with a maximum of 5 points and a minimum of 1 point. The detailed scoring criteria are presented in Table 2 and Table 3.

Table 2. Scoring Criteria for Forearm Passing Technique in Volleyball

Score	Technique Criteria	Hand Position	Contact Point	Ball Placement	Continuity	Overall Evaluation
5	Highly standardized	Correct	Correct	Clear	Good	Excellent
4	Basically standardized	Basically correct	Basically correct	Basically clear	Good	Good
3	Moderate	Average	Average	Average	Average	Moderate
2	Poor form	Incorrect	Incorrect	Unclear	Poor	Poor
1	Very poor	Incorrect	Incorrect	Incorrect	Very poor	Very poor

Table 3. Scoring Criteria for Volleyball Serving Technique

Score	Technique Criteria	Hand Position	Contact Point	Ball Placement	Effectiveness	Overall Evaluation
5	Highly standardized	Correct	Correct	Clear	Good	Excellent
4	Basically standardized	Basically correct	Basically correct	Basically clear	Good	Good
3	Moderate	Average	Average	Average	Average	Moderate
2	Poor form	Incorrect	Incorrect	Unclear	Poor	Poor
1	Very poor	Incorrect	Incorrect	Incorrect	Poor	Very poor