Modular Curriculum Design and Practice for Cultivating Basketball Teaching Ability in Vocational Undergraduate

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Abstract: This study focuses on cultivating teaching competencies in vocational undergraduate basketball education. By establishing a "design-practice-reflection" curriculum framework, it analyzes the core components of modular courses and elaborates on the design logic of theoretical modules, skill training modules, and scenario-based modules. The research also outlines practical pathways including in-school simulations, off-campus practices, and reflective optimization. The findings demonstrate that this modular curriculum effectively bridges teaching competency development with job requirements, helping students form a closed-loop capability system of "theory-skills-application". This provides a feasible solution for enhancing teaching competencies in vocational undergraduate physical education programs.
***Keywords*:** vocational undergraduate; basketball teaching; ability cultivation; modular curriculum

1. Introduction

The modular basketball teaching curriculum is a pedagogical framework designed to cultivate teaching competencies through structured modules. By integrating theoretical knowledge, practical skills, and contextual scenarios, it aligns with professional requirements to facilitate progressive skill development. However, current vocational undergraduate basketball education predominantly follows traditional models, which often result in overly academic content, skill training lacking real-world application, and disconnected practical components from industry demands. These limitations hinder graduates' swift adaptation to roles in primary/secondary school physical education or basketball coaching institutions. To address this, there is an urgent need to establish a practice-oriented modular curriculum system that bridges the gap between educational objectives and workplace requirements. Through scientific design and practical implementation, this approach aims to effectively fill the "training goals vs. job demands" gap – the core focus of this research.

2. Modular curriculum design for cultivating basketball teaching ability at the undergraduate level

2.1 Design of basic theory module of basketball teaching

Conduct content screening by investigating actual job demands related to vocational undergraduate basketball teaching. Combining core teaching tasks, establish fundamental theoretical points including basketball pedagogy principles, students 'physical and mental development patterns, teaching objectives with key challenges, and evaluation frameworks. Eliminate overly academic content with low practical value to ensure direct alignment between theory and workplace requirements. Design teaching organization using a "theory lecture + case analysis + group discussion" format. Each theoretical section should be paired with 1-2 real-world teaching cases to guide students in analyzing theoretical application logic. Through group discussions, clarify common misconceptions in theoretical implementation to reinforce understanding. Develop assessment methods by abandoning traditional written exams. Require students to create practical application plans for designated teaching scenarios, demonstrating how to apply teaching principles in setting objectives and overcoming challenges. This approach evaluates students' ability to transform theoretical knowledge into practical teaching strategies.

2.2 Construction of basketball teaching skills training module

Through skill decomposition, basketball-specific teaching techniques are divided into four core modules: movement demonstration, verbal instructions and explanations, error correction guidance, and classroom organization, each with clearly defined training objectives. Scenario-based simulations are conducted to create realistic teaching environments, such as "Beginner Basketball Classes for Youth" and "Advanced Basketball Skills Enhancement Programs". Students take turns acting as instructors to teach designated skills, while others assume different learner roles to simulate real classroom interactions [1]. Feedback and refinement processes are implemented: After each simulation, students self-evaluate skill

application during teaching. Instructors then provide feedback on dimensions like demonstration accuracy, clarity of explanations, and timeliness of error correction. Students undergo a second simulation training session addressing identified issues until they fully master core teaching skills.

2.3 Basketball teaching scenario simulation and scheme design module development

To develop teaching scenarios, we collected common complex situations from frontline basketball instruction and combined them with post-employment teaching scenarios for vocational undergraduate students. We designed 10-15 typical teaching scenarios, each with a clear core question. The guidance plan provides a "goal-strategy-evaluation" framework, helping students integrate their theoretical and practical foundations to design teaching plans for specified scenarios. The plans must specify the rationale for teaching strategy selection, time allocation, and contingency measures, while encouraging innovative approaches [2]. Through simulation verification, students conduct 15-20 minute scenario-based teaching simulations. By observing participants' engagement and skill mastery, we assess plan feasibility. Adjustments are made based on simulation results, forming a "design-verify-optimize" cycle to enhance the practicality and flexibility of teaching plans.

3. Modular curriculum practice for cultivating basketball teaching ability at the undergraduate level

3.1 Carry out simulated training of basketball teaching in school

Practical Training Preparation: Based on the teaching competency foundation of vocational undergraduate students, practical training themes are determined and divided into 4-5 person groups. Each group selects one theme and is required to complete lesson plan design three days in advance, which must specify teaching objectives, segment durations, interactive methods, and contingency plans [3]. Simulation Teaching Implementation: A simulated classroom environment is set up in a basketball arena. Each group selects one student as the "teacher" while others play different roles as "learners". The "teacher" must fully present a 40-minute teaching process, including warm-up, skill demonstration, group practice guidance, and summary evaluation. Two recorders are assigned to document the completeness of teaching segments and identify issues. Immediate Feedback: After teaching, instructors first guide learners to share their learning experiences, then provide evaluations from dimensions such as teaching logic, demonstration accuracy, and problem-solving skills. Finally, group discussions optimize solutions to ensure each simulated training session addresses 1-2 specific teaching weaknesses.

3.2 Implement off-campus basketball teaching practice

Position Matching: Schools collaborate with partner primary/secondary schools and basketball training institutions to assign positions based on students 'skill levels, clarify responsibilities, and assign corporate mentors to work alongside school mentors. On-site Practice: Students follow the partner organization's teaching schedule, submitting weekly practice logs that detail instructional content, challenges encountered, solutions attempted, and outcomes. Corporate mentors provide daily on-site guidance, while school mentors conduct weekly online reviews [4]. Practice Evaluation: Upon completion, corporate mentors assess performance through three dimensions: task execution, teaching effectiveness, and communication skills. School mentors evaluate based on practice logs and reflection reports, with each component carrying equal weight (50%). Only qualified participants complete the program, ensuring substantive skill development rather than superficial compliance.

3.3 Basketball teaching practice reflection and ability optimization

Through individual reflection, students collect teaching materials including instructional videos, learner feedback forms, and lesson plans. They then compare these with the professional undergraduate basketball teaching competency standards to identify gaps, draft reflective reports, and pinpoint root causes with improvement strategies. In group workshops (8-10 participants), members share specific practice challenges and reflections, collaboratively developing solutions to create a shared repository of best practices. The third phase involves mentorship: instructors provide tailored guidance based on student reports and group discussions, offering improvement methods and referencing teaching cases [5]. Students then implement optimized teaching practices through one specialized session to validate effectiveness, subsequently refining the process through iterative feedback—a cyclical "reflect-optimise-verify" approach that progressively enhances teaching competencies.

4. Conclusion

The analysis demonstrates that modular curriculum design addresses professional needs through three key components: theoretical modules that identify core job competencies, skill modules that break down practical implementation points, and contextual modules that simulate real-world teaching scenarios. This creates a progressive training framework of "theory-practice-application" that overcomes the traditional curriculum's imbalance between theory and practice. The practical component integrates three phases: foundational training through campus simulations, hands-on practice at workplace settings, and continuous improvement via reflective optimization. This approach enables students to develop teaching skills in authentic or simulated environments, effectively resolving the core issue of "disconnection between learning and application." The reflective optimization phase establishes a multi-dimensional feedback mechanism involving "individual, group, and mentor" interactions, helping students accurately identify competency gaps and make sustained improvements. This closed-loop system of capability development significantly enhances job adaptability.

References

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