

Exploring Pathways and Integration Mechanisms of Competitions and Teaching in Taekwondo Physical Education for Chinese University Students

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Abstract

Against the backdrop of sports-education integration and ongoing reform in university physical education, the alignment of competition and instruction has become a key issue in enhancing the educational value of Taekwondo in Chinese universities. This study examines the integration mechanisms and implementation pathways of competition-teaching integration based on a dual-track, tiered instructional model. A four-dimensional framework is constructed, comprising goal coordination, content inter-connectivity, process co-education, and evaluation linkage, alongside implementation strategies in curriculum design, competition systems, training integration, and institutional support. The findings indicate that effective integration relies on the alignment of objectives, the bidirectional transformation of teaching and competitive content, the establishment of a coherent “learning-training-competition-performance” process, and differentiated evaluation mechanisms. The proposed model supports diverse student development and promotes the coordinated enhancement of technical competence, competitive ability, and cultural literacy, offering both theoretical and practical implications for university Taekwondo education.

Keywords: University Taekwondo, Integration of Teaching and Competition, Dual-track System, Stratified Teaching, Integration of Physical Education and Sports

Introduction

With the deepening of global education reform, physical education is transitioning from mere skill transmission to comprehensive quality development, and the integration of sports and education has emerged as a common trend in international education reform. In 2020, the General Administration of Sport of China and the Ministry of Education jointly issued the Opinions on Deepening the Integration of Sports and Education to Promote the Healthy Development of Youth, which explicitly proposed specific requirements such as “incorporating physical education into junior and senior high school academic examinations” and “supporting the establishment of sports teams in primary schools, secondary schools, and universities”. This marks Chinese physical education undertaking entering a comprehensive promotion phase of sports-education integration. Simultaneously, the Ministry of Education’s

Guiding Outline for Ideological and Political Construction in Higher Education Curricula emphasizes that physical education courses should “establish the educational philosophy of health first and prioritize the cultivation of patriotism and collectivist spirit”. Under this backdrop, university physical education curricula face the era's imperative of transforming from “skill transmission” to “comprehensive educational development”. How to achieve organic integration of teaching and competition has become a key issue in enhancing the quality of sports education (You, 2023). Among various university sports programs, Taekwondo serves as a particularly illustrative case for examining this issue, given its dual identity as both an Olympic competitive sport and a widely accessible physical education course.

Since Taekwondo became an official Olympic sport in 2000, it has rapidly gained popularity in Chinese higher education institutions. According to the Chinese University Sports Association, as of 2024, more than 300 universities across the country have established Taekwondo courses or clubs, with the number of student participants growing at an annual rate of approximately 15%. Rooted in the martial arts spirit of “beginning with courtesy and ending with courtesy”, Taekwondo integrates both competitive combat and poomsae (form) demonstration. It is not only suitable for mass popularization but also provides pathways for competitive advancement, making it one of the few sports capable of achieving the dual goals of “balancing popularization with improvement”. Consequently, it holds significant educational value in cultivating students’ willpower and self-protection awareness (Liu et al., 2023). Although Taekwondo has developed rapidly and possesses significant educational value, it is confronted with a structural problem that is prevalent in university sports in China, namely the separation of regular teaching and competitive practice. Unlike sports such as basketball and track and field, which have established mature league systems and institutionalized teaching and competition integration mechanisms, the Taekwondo courses in Chinese universities are developed in a way that separates teaching and competition on two parallel tracks rather than integrating them organically. This has created a unique predicament: The potential of Taekwondo to promote students’ all-round development is not limited by the scale of participation or resource conditions, but is constrained by the lack of a systematic mechanism that effectively connects classroom teaching and extracurricular competitions. However, behind this rapid development, the structural contradiction between teaching and competition has gradually emerged.

This structural disconnection manifests itself in both instructional and competitive domains, each revealing distinct yet interrelated deficiencies. From the perspective of teaching, current university Taekwondo instruction remains constrained by traditional teaching models. You (2023) pointed out that there is a prevalent “I teach, you learn” indoctrination-style approach in instruction, with students occupying a passive receptive position (You, 2023). Teaching content tends to be overly basic and routinized, lacking practical combat application, and the popularization of competition rules and refereeing knowledge remains insufficient. According to surveys, over 60% of elective course students remain unclear about the scoring rules of Taekwondo competitions upon course completion. This gives rise to a paradox: even when students possess interest in participating in competitions, they are deterred by their unfamiliarity with the rules (Zhang, 2025; Su et al., 2025).

While the instructional dimension suffers from content rigidity and passive student engagement, the competitive dimension exhibits an equally problematic fragmentation. From the perspective of competition, there exists a multiple disconnection between teaching and competition. Teaching objectives are oriented toward “mastering basic techniques”, while competition objectives are directed toward “achieving competitive rankings”. These two lack a unified talent cultivation positioning. Most students lack opportunities for competition participation, making it difficult to test teaching outcomes through competitions, and the concept of “promoting learning through competition” remains difficult to implement (Tong, 2023). A more fundamental issue lies in the fact that teaching and competition exhibit separation in terms of objectives, content, process, evaluation, resources, and support (Zeng, 2024). The fragmented state impedes the formation of an integrated “learning-training-competition” educational closed loop, thereby constraining the potential of Taekwondo in promoting students' comprehensive development. These intertwined deficiencies call for a systematic rethinking of how teaching and competition could be organically integrated rather than treated as separate endeavors.

The integration of competition and teaching refers to an organic integration model that incorporates competition elements into the teaching process and applies teaching outcomes to competition practice. Its theoretical logic can be summarized as follows: teaching provides foundational ability support for competition, while competition offers assessment standards and motivational incentives for teaching. From international perspectives, the National Collegiate Athletic Association (NCAA). In the United States has achieved organic integration of teaching and competition through a well-established league system, Japanese university martial arts programs have linked daily training with competitive levels through the “rank system”. Domestic scholar Zeng (2024) pointed out that, under the context of sports-education integration, Taekwondo teaching models in higher education should shift from “single skill transmission” to “multi-ability cultivation”. Based on above, the fundamental characteristics of competition-teaching integration can be summarized as goal consistency, content inter-connectivity, process coordination, and evaluation linkage (Zhang, 2025).

In summary, to address the practical dilemma of the mutual separation between university Taekwondo teaching and competition, it is imperative to construct a systematic competition-teaching integration mechanism. From a theoretical perspective, there is a need to clarify the internal logic and operational mechanisms of competition-teaching integration, addressing the questions of “what to integrate and why to integrate”. From a practical perspective, there is a need to design operable implementation pathways and support systems, answering the questions of “how to integrate and how to implement”. Specifically, this involves meeting diverse learning needs of students with varying proficiency levels through differentiated teaching, strengthening resilience and rule awareness through competitive training, enhancing team collaboration and cultural identity through poomsae demonstrations, testing teaching outcomes and stimulating learning motivation through competition practice, forming an integrated “learning-training-competition” educational closed loop, promoting students' physical and mental health and comprehensive development, improving students' technical application abilities, stress resistance, and team collaboration skills, cultivating sportsmanship and rule awareness, assisting universities in fulfilling the fundamental task of moral education, promoting campus sports culture construction, and supporting university sports brand development and educational quality

improvement. Therefore, it is necessary to conduct systematic research on the mechanisms and pathways of competition-teaching integration.

Based on the above, this study advances the following research questions:

Q1: What is the fusion mechanism between competition and teaching in Taekwondo physical education for Chinese university students?

Q2: What is the pathway for competition-teaching integration in Taekwondo physical education for Chinese university students?

To address the aforementioned issues, this study has constructed a systematic analysis framework that goes beyond mere teaching reform or competition reform. The innovation of this research mainly lies in three aspects: Firstly, it defines the integration of teaching and competition as a systematic reconfiguration of the educational process, rather than a simple superimposition of competitions and teaching, and operationalizes it through four-dimensional mechanisms including goal coordination, content interconnection, process co-education, and evaluation linkage. Secondly, it proposes a “dual-track, stratified” teaching model for the taekwondo project, providing an operational practical solution to the long-standing contradiction of “popularization and improvement” that has plagued Chinese universities in sports. Thirdly, it conducts empirical analysis by integrating case studies from multiple institutions, providing empirical support for the connection between policy mandates and grassroots practice implementation. The main contribution of this research to the field of social sciences, especially sports sociology and educational policy research, lies in the construction of a transferable theory model for the integration of teaching and competition. This model not only provides an analytical tool for diagnosing the existing disconnection between teaching and competition, but also offers a strategic path for promoting institutional change, thereby enriching the theoretical exploration of sports education reform and providing references for policy formulation in the context of deepening the integration of sports and education.

Funding

Q1: What is the fusion mechanism between competition and teaching in Taekwondo physical education for Chinese university students?

Exploring the Goal Coordination Mechanism for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

Goal synergy constitutes the logical starting point for the integration of competition and teaching. Within a dual-track, tiered instructional framework, the research team has constructed a progressive goal system that ensures the unity of educational objectives, the progression of hierarchical goals, and the complementary of dual-track aims. At the level of unified educational objectives, both classroom instruction and competitive training are oriented toward the fundamental goal of cultivating well-rounded individuals-socialist builders and successors with comprehensive development in moral, intellectual, physical, aesthetic, and labor education. The distinctive spirit of Taekwondo-courtesy, integrity, perseverance, self-control, and indomitable will-is consistently transmitted and promoted across both teaching and competitive contexts. At the level of hierarchical progression, a three-tiered system of foundational, intermediate, and advanced goals is established: the foundational level (basic classes) focuses on mastering fundamental techniques and

competition rules, enhancing physical fitness, and fostering etiquette and rule awareness; the intermediate level (advanced competitive classes) emphasizes the development of practical combat skills or poomsae performance, along with resilience, teamwork, and cultural confidence; and the advanced level (university team training classes) aims to cultivate an integrated competence combining technique, spirit, and culture, enabling participation in competitions and cultural dissemination while embodying core socialist values. At the level of dual-track complementary, the competitive track prioritizes athletic performance and resilience, whereas the physical education track emphasizes cultural literacy and team consciousness; together, these tracks are mutually reinforcing and jointly promote students' holistic development (Ministry of Education of the People's Republic of China, 2020).

The goal synergy mechanism serves as the logical starting point for integrating teaching and competition, as both represent complementary dimensions of the same educational process. From a systems perspective, the absence of unified goals leads to fragmented resources, conflicting evaluation standards, and disjointed educational outcomes. You (2023) finds that 67% of university Taekwondo teachers prioritize technical mastery, whereas coaches emphasize competition performance, revealing a fundamental divergence in talent cultivation goals. This results in a mismatch between teaching and competitive demands, with instruction focusing on basic techniques and standardization, while competition requires tactical integration and adaptability. As noted by Zhai (2023), the essence of sport-education integration lies in fostering holistic development. Therefore, a goal synergy mechanism should anchor both teaching and competition in the shared objective of "educating through sport", establishing a progressive goal chain from foundational skills to athletic competence and comprehensive qualities, thereby forming a closed-loop system in which teaching supports competition and competition, in turn, refines teaching.

Exploring the Content Interoperability Mechanism for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

Content inter-connectivity refers to the mutual transformation and reinforcement between instructional and competitive content. The dual-track, tiered teaching model provides institutional support for such integration (Analysis on the Teaching Content Reform and Current Situation of Taekwondo Courses in College Physical Education Majors, 2025). On the one hand, the transformation of competitive content into teaching involves introducing advanced techniques, tactical applications, and scientific training methods from high-level competitions into classroom instruction; for instance, advanced competitive classes incorporate sports psychology interventions and data-driven motion analysis to enhance students' contextual understanding of skill application, while competition rules and refereeing knowledge are embedded into theoretical instruction alongside injury prevention and psychological training to align teaching with competitive demands. On the other hand, instructional content underpins competitive performance by providing foundational support: standardized basic techniques establish the groundwork for advanced skills, systematic theoretical learning improves competitive cognition, and poomsae training enhances body control, with the quality of foundational classes directly influencing the progression of students to higher levels. Furthermore, the integration of dual-track content enables bidirectional empowerment: competitive classes incorporate cultural elements of poomsae to deepen cultural understanding, while the physical education track adopts competitive

training methods to enhance technical performance in demonstrations. Through this mutual penetration, instructional and competitive content form an organic and cohesive whole.

The theoretical foundation of the content inter-connectivity mechanism lies in the dialectical unity of “learning for application” and “application for learning.” From the perspective of cognitive learning theory, skill acquisition progresses through three stages—cognitive, associative, and autonomous—and competitive contexts provide an optimal setting for the transition from the associative to the autonomous stage. Li (2021) notes that while isolated technical drills contribute to movement standardization, they are insufficient for developing decision-making abilities in dynamic confrontations; only through repeated practice in competition-like environments can skills be transformed into functional competence. Yang (2023) further finds that incorporating competition rules and refereeing knowledge into classroom teaching improves students’ depth of tactical understanding by approximately 30% and significantly increases their willingness to participate in competitions. Conversely, deficiencies and tactical misunderstandings exposed in competition offer direct feedback for instructional adjustment. For example, when students in advanced competitive classes reported difficulties in applying spinning kick techniques during sparring, the teaching team subsequently strengthened decomposed instruction and supplementary drills for this technique in foundational classes (Lin & Gao, 2020). This cyclical process of “teaching-competition-feedback-teaching” encapsulates the core value of content inter-connectivity.

Exploring the Process-Oriented Co-Construction Mechanism for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

Process-oriented co-education emphasizes the integrated alignment of classroom instruction, tiered training, and competitive practice (Yang, 2023). Drawing on prior studies of Taekwondo pedagogy and instructional reform (Li, 2021; Li, 2022) and the “teaching-practice-competition” model (Yue & Fan, 2025), this study proposes a four-in-one framework of “learning-training-competition-performance”. Competitive participation serves as an evaluative mechanism through structured pathways from intro-university to national-level events, enabling the validation of learning outcomes in authentic contexts. Meanwhile, performance activities facilitate the internalization and dissemination of Taekwondo culture. Together, this integrated process forms a coherent pathway that links learning, practice, evaluation, and cultural development.

The process-oriented co-education mechanism embodies the integrated educational philosophy of “learning-training-competition.” From a pedagogical perspective, knowledge internalization and competence development constitute a continuous process; artificially separating them into disconnected stages inevitably weakens learning outcomes. Yuan and Wang (2023) demonstrate that students participating in a complete training chain—comprising classroom instruction, club training, team selection, and competition—exhibit significantly higher skill retention and stronger identification with sportsmanship than those engaged in classroom learning alone. This finding underscores the core logic of process co-education: classroom teaching addresses “whether students can perform,” tiered training enhances “how proficient they are,” and competition determines “whether they can apply skills effectively,” with each component being indispensable. The situational teaching approach proposed by Ye et al. (2021) similarly reflects this logic by embedding competitive contexts into daily instruction to facilitate skill internalization and transfer. Furthermore, effective

implementation of process co-education requires clear articulation mechanisms across stages, for example, progression tests between foundational and advanced classes, and selection trials between advanced classes and elite team training, ensure that outputs from each stage feed coherently into the next, forming a vertically integrated “learning-training-competition” pathway.

Exploring the Evaluation Linkage Mechanism for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

Evaluation linkage integrates competition performance and demonstration outcomes into the academic assessment system, thereby promoting learning and training through evaluation. Drawing on multidimensional assessment theory (Xu et al., 2010), this study establishes a comprehensive framework encompassing technical assessment, competition performance, demonstration outcomes, and classroom participation, covering skills, processes, and overall performance. Specifically, technical assessment focuses on movement standardization and poomsae completion; competition performance emphasizes participation, results, and sportsmanship, demonstration outcomes evaluate engagement and expressiveness; and classroom participation considers attendance and learning attitude. To ensure fairness and instructional alignment, differentiated and tiered evaluation standards are applied: foundational classes prioritize technical accuracy, etiquette, and participation, advanced competitive classes emphasize combat ability, tactical application, and resilience, and elite team training focuses on specialized skills, poomsae creation, and comprehensive competence. As highlighted by Li et al. (2025) and Zeng (2024), such differentiated evaluation is essential for achieving the integration of learning and assessment. Furthermore, the combination of formative and assumptive evaluation-incorporating training logs, periodic tests, daily performance, and final assessments, as well as competition and demonstration outcomes-ensures that evaluation spans the entire learning process, thereby maximizing its motivational and feedback functions (Li et al., 2024; Liu, 2022).

The evaluation linkage mechanism functions as a critical regulatory tool by exerting a “steering effect” that aligns teaching and competition toward integrated development. Under traditional assessment models, instructional evaluation prioritizes technical standardization, whereas competitive evaluation focuses primarily on rankings, resulting in a structural disjunction that compels students to train either for examinations or for competitions. Empirical evidence indicates that incorporating competition performance into academic evaluation significantly enhances students’ engagement in extracurricular training and improves the efficiency of talent progression between instructional and competitive pathways (Zeng, 2024). From the perspective of motivation theory, such linkage establishes a positive feedback loop of “performance-feedback-reinforcement”, wherein competitive success is translated into academic recognition, thereby converting external incentives into sustained intrinsic motivation; conversely, competitive setbacks are transformed into diagnostic feedback that informs instructional adjustment and mitigates outcome-oriented formalism. Further studies demonstrate that differentiated evaluation frameworks effectively enhance student engagement across levels, as reflected in increased classroom participation in foundational cohorts and consistently high training attendance in advanced groups (Lv, 2025; Piao & Jia, 2025). Ultimately, the mechanism not only resolves the fragmentation between learning and competition but also activates motivation across diverse student

groups through stratified standards, thereby fulfilling the fundamental educational objective of fostering holistic development rather than mere performance ranking (Huang et al., 2024).

Q2: What is the pathway for competition-teaching integration in Taekwondo physical education for Chinese university students?

Exploring the Stratified Optimization Path for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

Curriculum system optimization constitutes the foundation of integrating teaching and competition, with its core grounded in the dual-track, tiered teaching model. First, a three-level hierarchical structure is established. Prior research suggests that instruction should emphasize experiential and student-centered learning, focusing on how students acquire skills and solve problems (You, 2023). Accordingly, students are stratified based on their foundational abilities and developmental needs into three tiers, like, foundational classes, advanced competitive classes, and elite team training classes (see Fig 1). Foundational classes target beginners and novice learners, adopting modified approaches to cultivate interest and basic skills, advanced competitive classes are designed for students with solid foundations and competitive interests, emphasizing practical combat skills and tactical application; and elite team training classes focus on students with specialized potential, providing intensive training to prepare for high-level competitions.

In operationalizing tiered standards, students' initial placement is determined through entry assessments combining skill tests (e.g., roundhouse and front kicks) and physical fitness evaluations (flexibility, strength, and endurance). Dynamic adjustments are conducted at the end of each semester, allowing mobility across levels, the mechanism ensures the scientific validity of tiered instruction while facilitating students' vertical progression (Lv, 2025; Li, 2023). Second, a dual-track integrated curriculum is developed, comprising a competitive track centered on sparring and practical training, and a physical education track focused on poomsae culture. Although designed in parallel, the two tracks are not isolated in content. Zhou and He (2022) argue that university poomsae instruction should integrate competitive attributes with cultural connotations; accordingly, poomsae culture is incorporated into advanced competitive classes, while competitive training methods are adapted within the physical education track, achieving complementary and coordinated educational outcomes. Finally, an online teaching resource platform is established. Supported by standardized Taekwondo facilities and equipment, the platform integrates technical demonstration videos, poomsae tutorials, and competition case analyses, thereby providing resource support for tiered instruction (Zhang, 2025).

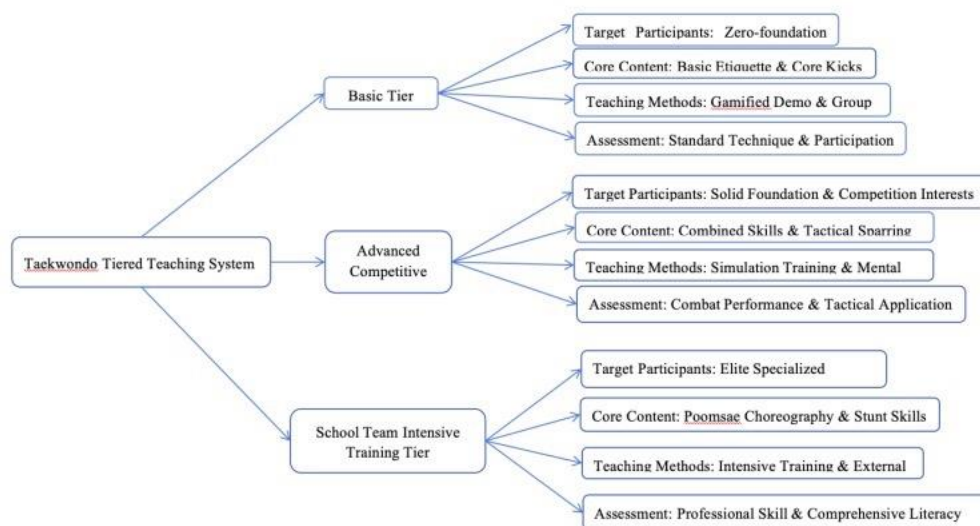


Fig 1. Three-tier hierarchical teaching system of Taekwondo for Chinese university students

Exploring the Multi-Faceted Design Path for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

The construction of a competition system centers on providing differentiated participation platforms for students at various levels, serving as a key mechanism for operationalizing the principle of “promoting teaching and learning through competition” in university physical education (Yang, 2024). Aligned with the characteristics of Taekwondo and the three-tier instructional framework, this study develops a structured and integrated competition system. First, a four-tier league system—class-level, departmental, university-wide, and intercollegiate—is established to ensure progressive participation and broad coverage. Class-level competitions are embedded within teaching to guarantee full engagement; departmental competitions strengthen collective identity; university-level events function as primary selection channels for representative teams; and intercollegiate competitions expand competitive exposure. Second, participation pathways are precisely matched to instructional tiers: foundational students engage in class and departmental competitions to build experience; advanced students participate in university and provincial events to enhance tactical and practical competence; and elite team members compete in national-level championships to refine specialized performance and pursue excellence. Third, competition formats are diversified by incorporating poomsae events and technical performances, alongside flexible structures such as point-based systems and mixed-team formats, thereby enriching competitive content. Finally, competition organization and officiating are embedded into practice-based teaching. Through referee training and involvement in the full competition cycle, students systematically acquire and apply knowledge of rules and officiating, achieving the integration of learning, practice, and application.

Exploring the Evidence-Informed Integration Path for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

The integration of the training system aims to establish a scientific and systematic mechanism that ensures effective articulation across hierarchical levels. Specifically, a three-tier structure of “basic training-specialized training-per-competition intensive training” is constructed, with foundational classes maintaining 2-3 sessions per week, advanced

competitive classes increasing to 3-4 sessions with a focus on specialized skills, and elite team members undergoing intensive competition preparation; such a structured system is critical for ensuring continuity and directly enhancing performance outcomes (Ananchenko et al., 2016). At the same time, scientific training methods are introduced by integrating modern information technologies, multimedia instructional tools, sports psychology interventions, and data-driven motion analysis to improve both technical-tactical performance and psychological resilience (Ye, 2021; Tong, 2023), while training content is systematically organized around technical-tactical skills, poomsae practice, and physical conditioning (Li, 2021). To address the persistent conflict between academic study and athletic training, institutional innovations such as flexible academic systems, extended study periods, academic advising, credit recognition for training, and optimized scheduling are implemented, drawing on the “student-athlete” model. Furthermore, a coordinated “club-university team” linkage mechanism is established, in which clubs promote participation and interest while university teams focus on elite development, forming a coherent talent pipeline, allowing team members to serve as club instructors further enhances both their instructional capacity and the overall training quality.

Exploring the Synergistic Support Path for Integrating Competition and Teaching in Taekwondo Physical Education for Chinese University Students

The construction of a support system is essential for the effective implementation of teaching–competition integration. A multidisciplinary instructional team composed of professors, lecturers, and professional coaches, supported by elite athlete involvement and targeted professional development, enhances the scientific rigor of training (Zhai, 2023). Adequate infrastructure-including standardized facilities, protective equipment, and electronic scoring systems-combined with efficient scheduling and resource sharing, provides the material foundation for teaching and competition (Huang, 2019). Institutional support is further strengthened through the integration of teaching-competition models into reform frameworks, the establishment of academic support and incentive policies for student-athletes, and the improvement of safety and insurance mechanisms, thereby mitigating conflicts between academic study and training (Yang et al., 2021). Moreover, the integration of core Taekwondo values-courtesy, integrity, perseverance, self-control, and indomitable spirit-into both instructional and competitive contexts fosters responsibility, teamwork, and cultural identity, ultimately promoting students’ holistic development (Liu et al., 2023; Huang, 2019; Zhou, 2022).

In addition, the study identifies supplementary institutional practices in Chinese universities that further exemplify the integration of teaching and competition in Taekwondo physical education. One approach involves project-based teaching combined with digital empowerment, whereby universities utilize Taekwondo competitions within campus sports festivals as instructional platforms, integrating information technologies such as electronic sensing devices and computerized timing systems to provide real-time feedback on movement speed and execution quality. Another model constructs a “training–competition–education” triad framework for university team development, integrating the principle of “promoting teaching through competition,” school-based curriculum development, and the balanced emphasis on technique and moral cultivation, thereby aligning competitive performance with educational objectives (Zhou et al., 2025). Additionally, some institutions adopt an integrated “learning-training-competition” model and organize annual teaching

achievement exhibitions under the theme of “competition-teaching integration,” combining student performance showcases with open demonstration classes to evaluate the effectiveness of ideological-political integration and digitalized instruction, and to advance a student-centered “whole-person education” approach (Yang, 2023). These practices reveal several common factors underpinning successful integration: strong institutional leadership, sound policy frameworks, curriculum reform, accessible competition platforms, and qualified professional staff (Tang, 2025). At the same time, differentiated pathways are required across institutional types: sports-specialized universities may emphasize competitive excellence, application-oriented institutions may prioritize practical skill development, and comprehensive universities may focus on the systematic integration of “learning-training-competition”.

Conclusion

In conclusion, a systematic evaluation mechanism is essential for identifying disjunction and guiding continuous improvement in teaching-competition integration. This study proposes a four-dimensional framework-goal alignment, content integration, process co-education, and evaluation linkage-which unifies value orientation, promotes resource flow, and integrates the “learning-training-competition-performance” chain into a sustainable model. Implementation requires a three-tier curriculum system, a four-level competition structure with differentiated pathways, and a three-stage training model supported by scientific methods, alongside comprehensive support in faculty, facilities, institutional policy, and ideological-political integration. The dual-track, tiered teaching model effectively addresses diverse student needs by integrating competitive and cultural dimensions, forming a closed-loop educational system. Future development should align with institutional missions, prioritizing elite performance, practical competence, or holistic development accordingly.

Research Contribution

This study establishes a four-dimensional framework for teaching-competition integration and proposes a “competitive-physical education” dual-track differentiated teaching model. By designing operable implementation pathways across four systems, it expands differentiated teaching theory and fills the research gap in university Taekwondo courses.

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Conflicts of Interest

The authors declare no conflict of interest.

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